The Board met telephonically, Jean Richardson, Ph.D., Chair, presiding.

PRESENT

JEAN RICHARDSON, Ph.D., NOSB Chair; Consultant and organic maple syrup producer
TRACY FAVRE, NOSB Vice Chair; Consultant
HAROLD AUSTIN, NOSB Secretary; Zirkle Fruit Company
CARMELA BECK, Driscoll Strawberry Associates, Inc.
COLEHOUR J. BONDERA, Kanalani Ohana Farm
TOM CHAPMAN, Clif Bar & Company
LISA de LIMA, MOM's Organic Market
ZEA SONNABEND, California Certified Organic Farmers (CCOF)
ASHLEY SWAFFAR, VitalFarms
JENNIFER TAYLOR, Ph.D., Florida A&M University
FRANCIS THICKE, Ph.D., Radiance Dairy
C. REUBEN WALKER, Ph.D., Southern University and A&M College
STAFF PRESENT

MICHELLE ARSENAULT
LISA BRINES
EMILY BROWN ROSEN
PAUL LEWIS, NOP Standards Division Director
MILES MCEVOY, Deputy Administrator
DEVON PATTILLO
JENNY TUCKER, NOP Associate Deputy Administrator, Technology Facilitator
JESSICA WALDEN
SONYA WILSON

COMMENTERS PRESENT

KEVIN BOYCE, Agricultural Conversation
JESSICA BELZ, Fiberstar, Inc.
LAURA BATCHA, Organic Trade Association
PATTY LOVERA, Food & Water Watch
RONALD GONZALEZ, Dole Tropical Products Latin
WEST MATHISON, Stemilt Growers
RHODES YEPSEN, Biodegradable Products Institute
AMBER POOL, CCOF
MARNI KARLIN, Organic Trade Association
AMELIE HAYTE, GNT USA, Inc.
PAMELA SAUNDERS, CROPP Cooperative
BRIAN LEHMANN, Consumer
HILDA TOVAR, Berrymex
KATHERINE DIMATTEO, Wolf, DiMatteo + Associates
EILEEN HOURIHAN MCCARTHY, Registered Dietician
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DR. LEWIS: I'd like to welcome NOSB members and members of the public for today's teleconference.

We appreciate the NOSB members presentation on this call today and to all the members' efforts and for serving on the Board.

I'm really excited about this opportunity for the Board to conduct this meeting, the public comment process via teleconference really supplies the opportunity for greater public access to NOSB.

These meeting, along with other meetings, public meetings of the NOSB operates under the Federal Advisory Committee Act.

I'm looking forward to hearing the comments that will be occurring today and the --

(Telephonic interference.)

DR. LEWIS: -- in addition to the actual face-to-face meeting we'll be having the last week in October.
It will help the Board preparing their recommendations to USDA.

I want to again thank members of the public for participating in today's teleconference. And I'm looking forward to a very productive and engaging meeting today. Thank you.

DR. TUCKER: Okay, we're going to turn it over to Jean Richardson now. So Jean, welcome. As Board chair she's going to be moderating the public comment process. So let's do a sound check. Jean, can you hear us?

CHAIR RICHARDSON: Hello. Yes, I can hear all of you and I hope you can hear me too.

DR. TUCKER: Yes, we can. Please go ahead.

CHAIR RICHARDSON: Very good. Okay, the first thing is this is the first time we've done this everybody out there in internet-land or wherever you are.

And it looks as though there are 68 people on audio and 60 on the web, looking at the numbers that I have on my computer screen.
So, what we have to just all do is try to think of ourselves at some gorgeous meeting place. The sun is shining outside and it looks just great. And we're forced to be inside to be on this call, but it's going to be good fun anyway.

I just want to remind all of you that as you're speaking if you're using your speaker phone you're never as clear as if you're sort of speaking directly into a phone.

So when you are giving your presentations be sure you speak as clearly and as loudly as is appropriate so that we can all of you hear.

Because there's bound to be some background and some odd little kinks that happen during the next couple of hours.

I'm really pretty excited to have this opportunity to expand our public comment period.

We still have just as many people going to be talking as usual at the in-person meeting.

And so this is allowing us to hear from more people, people that couldn't come, or can't
take the time or afford necessarily to fly all the way to Vermont for the next meeting.

So it's really great. And I'm just delighted to be able to have this opportunity today.

So hopefully you'll excuse our technological mistakes and errors as we try to start a new and expanded way of taking public comment which is so critically important to all of us as Board members.

So, I will ask the first person to speak on my list is Kevin Boyce. And on deck we will have Jessica Belz. So, over to you Kevin if you are there.

MR. BOYCE: I am here. Thank you very much.

I wanted to address the Board on some of the current standards on the pathogen kill for organic material, processed manures specifically.

We have a technology that allows us a pathogen kill in a nonthermal manner. So currently the two guidelines for the elimination
of pathogen within manure product is by composting or by the addition of heat to the process.

We have -- our technology is a little bit unique again, and it's a nonthermal technology that has a pathogen kill far greater than we can achieve with even a composting process. And it's much more uniform. So we don't have any spots make it through the process without a pathogen kill.

It's a very consistent pathogen kill and all material is subjected to the pathogen kill.

So our process is unique in the fact, again it doesn't use a thermal technology. It actually uses a shock wave. We send the material through a venturi that gets a shock wave.

When it hits the shock wave it implodes the product, the manures, swine, chicken, cattle, and so forth.

And in that implosion of the product there's a massive pathogen kill which puts us far below the requirements outlined by the NOSB and NOP for pathogen kill.

So we are hoping at some point in time
to find a way that our equipment can be listed possibly as an alternative to the composting or heat process for pathogen kill.

CHAIR RICHARDSON: And that's it, Kevin?

MR. BOYCE: So, that's kind of it at a high level. And I just wanted to take some questions from you folks and see what we might have to do to make that happen.

CHAIR RICHARDSON: Great. Thank you very much, Kevin. Are there questions from the Board or comments?

DR. TUCKER: It looks like Francis has a question.

CHAIR RICHARDSON: Francis, yes.

Francis.

MEMBER THICKE: Can you hear me?

CHAIR RICHARDSON: Yes.

MR. BOYCE: I can hear you, Francis, yes.

MEMBER THICKE: Okay. Can you explain what you mean by implode? Is that a biological
process, a physical process? What does that mean?

MR. BOYCE: It's a physical process.

So, and again, I'm sure you guys understand all this but just in case somebody doesn't.

So we send the material through the machine. We have a pre-process that gets it to about a 70 percent moisture level in the product.

And then goes through the second piece of technology here that we're talking about which is pulling it, and basically enters an air tube.

At initial entrance into that tube the product moves about 100 miles an hour. The air flow is about 100 miles an hour.

And then it goes through a venturi which is basically like squeezing the garden hose a little bit, right?

So it picks up speed. And by the time it hits the treatment area it's going about Mach 1.

At the same time there's an air flow that causes a paper thin shock wave.

When the material hits that shock wave
the material actually implodes, in a physical implosion.

Makes it into a powder form, but also in that process the moisture molecules implode as well. And those are taken out as HNOs.

So we get to a point where it's an 8 percent moisture level. So we go from 70 percent moisture level to 8 percent moisture level in the treatment area.

The other unique piece of this process is that in that same shockwave area or treatment area the E. coli and so forth also implode. And they're removed, the vast majority of those are removed through that process as well.

CHAIR RICHARDSON: Great, excellent. Thank you very much, Kevin.

I should just point out that the National List is composed of materials and I think what you're presenting us with which is very interesting is a process.

And I'm hoping that you will also have submitted some written comments or some other
written materials that we could look at at a later date.

MR. BOYCE: I have submitted that.

CHAIR RICHARDSON: Great, thank you.

MR. BOYCE: Earlier. So I was hoping to have it in your hands today, but it sounds like it didn't get there.

But those have been submitted.

CHAIR RICHARDSON: Great. Thank you very much.

The next presenter is Jessica Belz and on deck will be Jessica Green.

DR. TUCKER: Jean, I'm sorry. Jennifer Taylor also had a question.

CHAIR RICHARDSON: Oh, I'm sorry, that's not showing up on my screen. Okay.

DR. TUCKER: She just chatted to the chairperson, not to all co-presenters. So I can see it but you cannot.

CHAIR RICHARDSON: Okay.

MEMBER TAYLOR: Sorry about that process. Can you hear me?
MR. BOYCE: Yes.

MEMBER TAYLOR: Thank you so very much for your presentation.

I wondered if there is a concern for residues of pesticides, process aids in particular and others within the process.

How do you see that taking place?

MR. BOYCE: I'm sorry, we haven't focused a lot on pesticides in the animal manures. What we were most concerned with were the NOP standards which were for the salmonella and the fecal E. coli and so forth.

So I'm not really sure I can discuss today at least the pesticide residue in that product.

MEMBER TAYLOR: Okay, thank you.

CHAIR RICHARDSON: Thank you.

Jessica Belz.

MS. BELZ: Okay, thank you. This is Jessica Belz. I am director of quality assurance at Fiberstar with its headquarters in River Falls, Wisconsin, and a production facility in Clewiston,
Florida.

I was going to be discussing Sunset 2017 regarding substance 205.601Q which is orange pulp, dried.

I don't know if you guys received my slides yesterday but I had a few diagrams to show you as well.

But the topic here is our understanding is that during the preliminary stage of the current sunset review the Handling Subcommittee believes that there might be a sufficient supply of organic materials now available to manufacture the dried orange pulp, and that this is the reason that the NOSB is currently considering its removal from the National List.

So for that reason I'm just going to talk for the majority of the period about the question of availability.

So first of all, I want to make sure that you understand how dried orange pulp is manufactured.

The dried orange pulp is produced under
patent protection exclusively by Fiberstar at our single facility in Clewiston, Florida.

This location was selected because the availability of raw materials is dependent on the orange juice industry.

According to various sources Florida citrus is typically grown for use in processing while citrus grown in other parts of the country is more often for fresh fruit.

Are you guys able to see my slides?

CHAIR RICHARDSON: No, I don't see them. Are they being posted, Jenny?

MS. ARSENAULT: Jessica, this is Michelle. I'm sorry, I didn't get your slides yesterday so we don't have them up.

MS. BELZ: Oh, that's fine. Okay, we can continue without them.

MS. ARSENAULT: When they come in I'll make sure that I forward them.

MS. BELZ: Okay. So, just discussing how the processing works.

Every box of oranges is approximately
90 pounds of oranges. So from a box of 90 pounds of oranges the juice facility yields approximately 5 pounds of wet pulp.

Because the moisture content of that pulp is approximately 95 percent the 5 pounds of wet pulp generates only about 4 ounces of dried pulp.

So to reiterate, a 90 pound box of oranges produces only 4 ounces of dried orange pulp.

So the process of dried orange pulp itself is a continuous process that produces 1,000 pounds of dried orange pulp or more per hour.

When our existing dried orange pulp facility was established we determined that the minimum time and quantity needed to make product at a steady state condition is 20 hours, so approximately 20,000 pounds of dried pulp.

And because that moisture content of the starting pulp is 95 percent it takes 400,000 pounds of wet pulp to produce one of those batches of 20,000 pounds of dried orange pulp.
So in order to produce a single batch of organic dried orange pulp a steady supply of 400,000 pounds of organic wet pulp needs to be sourced.

So keeping in mind that that 400,000 pounds of wet pulp is the minimum amount needed to produce one 20-hour day of production let's talk about the organic pulp availability.

So first of all, the citrus growing season is typically six months long, December through May, and the organic harvest is spread out over that entire six-month season, making it infeasible to collect and store any available wet pulp so that it may be processed into a single day of dried orange pulp production.

According to the USDA's Certified Organic Production Survey released in October 2012 there were 233 farms producing organic oranges in the United States, and of those only 18 of them were located in Florida.

Now, remember that Florida oranges are those typically used for processing while those
from other states are for the fresh fruit market. 

So, most of the organic production is actually grown in California.

Of the limited amount of organic oranges that are put into juice a large percentage actually ends up in the pulp in the orange juice itself.

A typical orange juice contains 6 to 12 percent pulp so consequently only about 35 percent of the orange pulp is removed after juicing and would be available for further processing.

This is according to the Handbook of Citrus Byproducts and Processing Technology by Robert Braddock.

Referencing again the USDA Organic Survey of 2014 there were less than 6,000 tons of oranges in Florida that were sold as organic in 2014.

Using the conversions I told you about earlier this is equivalent to 133,000 boxes of oranges which would yield at the most 667,000 pounds of wet organic pulp over the entire
six-month growing season.

If we figure that only about 35 percent of that wet pulp would be available after the juice processors have collected what they need for juice that would leave only 233,000 pounds of wet orange organic pulp for the entire year from the entire state.

Remember that twice that amount or a minimum of 400,000 pounds of wet pulp is necessary to produce just one day of dried organic pulp production.

DR. TUCKER: Okay, we're going to leave -- the timer is running. You timed that beautifully. So we're going to let you hear what it hears like when you run out of time.

So for public commenters that come on after this when you hit your five-minute point that's the noise you're going to hear to let you know that your time was out.

So, thank you for timing that so beautifully to let us demonstrate that technology.

CHAIR RICHARDSON: Jessica, thank you
for your comments. And you should be assured that all members of the Board will be receiving your written materials, the slides, as part of the general comments which will aid the Handling Subcommittee and the whole Board.

Are there any questions from Board members? I'm not seeing any question marks come up on my screen. Your presentation was very clear and much appreciated, Jessica. Thank you.

MS. BELZ: Okay, thank you.

CHAIR RICHARDSON: The next speaker is Jessica Green and she'll be followed by Laura Batcha. Jessica. Jessica Green? Jessica Green, citizen commenter had some general comments.

Okay, I guess she's not there at the present time. I'm sure technologically you'll let me know if she turns up.

So therefore Laura Batcha, you are up and Patty Lovera will be next.

MS. BATCHA: Hi, can you all hear me?

CHAIR RICHARDSON: Yes.
MS. BATCHA: Great, thank you. This is Laura Batcha with the Organic Trade Association. And I will see you all in Vermont in a couple of weeks, but I thought I'd take the opportunity to provide my comments during the webinar and free up a few minutes for you during your onsite meeting with your big workload.

So I'm going to comment on just a few areas. And you'll hear more about our extensive written comments onsite in Vermont.

I want to start with thanking the subcommittee for its continued work on the topic of GMOs and for the opportunity to provide some comments on the Materials Subcommittee's proposal on the prevention strategy guidance for excluded methods.

We greatly appreciate your recognizing the prior comments that we submitted on this discussion document and incorporated them into your current proposal, specifically the elements regarding the Organic Systems plan.

And we also are pleased to see you
acknowledge that the certifiers may need some additional training on GMO testing.

The issue of GMOs is continuing to rise in terms of a priority in organic. It's of course prohibited but the producers and handlers face significant challenges in the environment with adventitious contact with GMOs.

And it's really important as we look at this that we address these challenges in a way that distinguishes between what's in control of the organic producer and handler and what's not in control of the organic producer and handler.

Recent data released from USDA's National Agriculture Statistics Service in its 2014 Organic Survey provides for the first time a quantitative accounting of market losses due to GMO contamination over the last several years.

For the first time this national survey asked questions about crop losses due to contamination of GMOs, specifically in organic production systems.

And the survey indicated that between
2011 and 2014 there were 87 incidences of market loss totaling $6.1 million in crop losses, or about $70,000 per farm affected.

By comparison the data reported for the period of 2006 to 2010 aggregated to only $7,600. So that's a jump from $7,600 to $6.1 million in reported crop losses in the USDA's official data through its ag census.

It clearly speaks to the escalating pressures that the producers are feeling on this issue.

And so the work you're doing here is critically important.

We support the proposal. We urge you to pass the recommendation as written, but also just want to encourage you to continue the work that's not yet completed on strategies to mitigate GMOs coming into systems through conventional seed through your work on seed purity.

I'd like to also briefly address two petitions that we filed with NOP and NOSB. The first is a petition to revise the current allowance
for natural flavors in organic processed products to require organic forms when commercially available.

And the second is for the removal of lignosulfonate from the National List as an allowed floatation agent in post-harvest handling.

And we're pleased that the Crop and Handling Subcommittees have both voted in favor of those petitions.

These petitions are part of a portfolio of work that OTA is doing to ensure that the agency is a good steward of the National List.

And our goal is to help innovate alternatives to the National List and move towards organic alternatives where possible, and at the same time defending the judicious use of existing tools when those alternatives are not yet available.

We just have recently formed a new working group called the National List Innovation Working Group amongst our membership to create a vehicle to invest dollars and resources in applied
research to identify alternatives to materials on
the list and find more compatible alternatives.

The Organic Center's Ph.D. scientists
are going to be assisting the group to identify
university and other scientific partners on these
projects.

The first project that the National
List Innovation Working Group is taking on is our
organic alternative to celery on the National List
606 for curing organic meat.

The group is going to be working to
identify celery or other vegetable varietals that
can be grown organically, can be replicable and
allow for use of the standardized product and meet
the specification necessary to accomplish that
functional cure in organic cured meat products.

As we get this work underway we do
encourage the Board to re-list celery seed on 606
while this work gets underway.

But rest assured that this Innovation
Working Group will be taking on this project and
many others over the coming years.
So thank you and I look forward to seeing you all in Vermont.

CHAIR RICHARDSON: Thanks very much, Laura. And you did it without the bell going off.

Okay, Colehour, it looks like you have some questions.

MEMBER BONDERA: Yes. I apologize for pressing the button twice. Excuse me. I only have a question.

So, Laura, thank you for your comments. And as a side comment it was nice to see you in Hawaii. Thank you for spending the time at the NASDA meeting to see me and to make your presentation there.

My question is to follow up on your comment regarding the GMO topic and the testing.

And like you say, we should continue working on this. I wholeheartedly agree.

But what kind of steps or process could you expand upon regarding what you think we as the NOSB might be doing to mitigate some of these issues that producers deal with in terms of receiving
contamination from GMO from non-organic sources primarily, although that of course is not at all the only concern with all of the airborne pollination, et cetera, that happens.

Like in Hawaii it's out of control because it's not any producer growing something, it's wild grown papaya, for example, that you can't blame on a particular producer. And it's not specifically from production sites.

But I don't know if you have some specific ideas of how people could -- not people, how NOSB could continue down this path, or what next steps we might take. Thank you.

MS. BATCHA: Thanks, Colehour. And I enjoyed getting to see you as well. And I have finished up all of your wonderful coffee that I got from you at the farmer's market so I'm missing that good coffee. It was a nice trip to Hawaii.

On that question I think it's challenging because we want to be careful about who's responsible for what.

But a couple of things come to mind. I
think specifically in moving forward this contamination prevention strategy. That way we know we've covered our bases as an organic community and we can be on the record saying our producers and handlers know what to do.

Our certifiers know what to do. And we have the best rigorous system in place for monitoring our practice standards.

Therefore, when we are seeing this inadvertent contamination coming from outside of the system the rest of agriculture has to start to take some responsibility for those occurrences.

Because we know we're doing everything that we can within our own system to prevent this presence.

So I think that that's very important.

The continued work for the certifiers on the testing is key because we can't avoid a future where we have to have some sort of visibility on what's going on.

We might want to sort of defer to the don't ask/don't tell model, but I think we're just
simply beyond that. So we have to have good information.

And the certifiers have to know when they do get test results how to begin understanding again what's within the control of the operator and what's not within the control of the operator.

So I think those two things work together. The seed issue is the specific one. And one of the things that as we've worked on this over the years and provided comments to NOSB that we're really interested in focusing first and foremost on non-organic seed use in organic systems.

And as a starting place to really require the minimized contamination of those seed supplies.

I think you're right in identifying the wind and the pollen, particularly for coordination in terms of cross-contamination.

But the source of the seed is going to continue to be the most critical point in the supply chain in terms of being successful in the
So those are my initial ideas, Colehour. And I serve on the AC21 Committee and that group has been reconstituted. It's an Advisory Board to the Secretary on 21st Century Agriculture.

And we're going to be meeting again starting in December. And I think I'll continue to share information between that board and NOSB, and encourage NOSB to weigh into AC21 when the opportunities arise just to demonstrate that we're leading the way in terms of responsible action in this regard, and that we need USDA and the rest of agriculture to help prevent the contamination that's outside of the control of our operators.

CHAIR RICHARDSON: Thank you, Laura. Harold has a question.

SECRETARY AUSTIN: Thank you, Laura. This is Harold. A couple of points.

One, I wanted to thank you for the efforts that you guys are going to put forth dealing with the celery issue that you're talking about and
helping to move us forward in a different direction.

Also with a couple of petitions that OTA has put together and submitted to the various subcommittees.

One question on the petitions. And I think just for public knowledge, the steps that you've taken as you work on those petitions and bring them forward, gathering that information so that you can present it to those of us on the subcommittee and ultimately onto the Board, how do you gather the information that it's the right timing for something to be looked at for removal and then get behind it to support it in the form of a petition?

MS. BATCHA: Thanks, Harold. So I think it's a multi-year process.

I think if you look at the petition on the annotation change on natural flavors on 605A that work in terms of monitoring the issue goes all the way back to 2006.

And as we've followed the issue and
worked with our membership and the NOSB I think as far back as 2005 we reached out to industry, labor, manufacturers as well as users in the system and our membership. And we aggregate data about use and incidence and availability.

And in that particular instance we felt like given the Board reviewing the material in sunset and the new requirements for limiting annotation changes through that process we felt like now was the time to take that step and move toward the commercial availability with a preference for organic in certified organic products in the 95 category.

Simply because there was enough incidence that we could demonstrate a product available, but not quite yet enough volume.

So it's sort of the next logical step in moving the system that way.

But typically it's the number of years. The same with the lignosulfonate. We first started working on that material back in some of our early advising on the trade discussions with
the European Union and Japan and Korea on organic equivalents, and recognized it as a material that was causing some challenges in terms of those discussions.

So we started to dig in and try to learn more about how often it was being used.

And we surveyed, and visited manufacturers, and spoke with the pear association, and spoke with pear growers to really make sure we understood what the data was out there in terms of use and alternatives.

So it's really a multi-year combination of all that engagement and aggregation of the data, Harold.

CHAIR RICHARDSON: Okay, great answer. Harold, do you have a follow-up?

SECRETARY AUSTIN: Yes, thanks Jean. I couldn't get off the mute button.

Laura, thanks. That was a great explanation and I just wanted to thank you on behalf of the various subcommittees that I sit on for the effort to reach out to the stakeholders that are
directly involved, that are directly impacted, and
taking the time to really do some solid research
and information-gathering. That's all I really
wanted to pass back. Thank you so much for all the
energy and effort put forth.

MS. BATCHA: Well, thanks, Harold. And I'll share that with Gwendolyn Wyard and Nate Lewis because they do all that, all the heavy
lifting. Thank you.

CHAIR RICHARDSON: Thank you, Laura. And the next presenter is Patty Lovera and on deck will be Ronald Gonzalez.

MS. LOVERA: Hi, this is Patty. Can everybody hear me?

CHAIR RICHARDSON: Yes.

MS. LOVERA: Okay. Hi, my name's Patty Lovera. I'm with Food and Water Watch. So we're a national non-profit advocacy organization.

So I'm going to try to quickly cover a couple of topics that we also covered in our written comment.

So the first one is on the GMO
contamination piece. In 2014 Food and Water Watch
worked with OFARM which is a network of organic
grain cooperatives to survey organic grain growers
about not only what they were experiencing in terms
of contamination but to try to get a handle on some
of the costs.

So I submitted that into the record
before. If anybody hasn't seen it I'm happy to
give it to Board members again.

And we're happy that now some of the
economic data we collected as part of that survey
has been updated when asked those questions. We
think that that's great.

That's an appropriate role for USDA to
be collecting that kind of economic data on the
impact on organic growers.

But a couple of other things I just will
pull out from the survey results that we got from
surveying organic grain growers predominantly in
the Midwest was just their thoughts about how it's
working in terms of the policy or lack of policy
to date in terms of this coexistence.
So one out of two of the respondents who were surveyed was skeptical that the current coexistence programs are working.

And two out of three of them were skeptical or basically said that good stewardship practices on the part of users and non-users of the technology is going to be enough to prevent contamination problems.

And then they went on and many of them were also skeptical of whether crop insurance was an adequate response to that.

The reason I bring those up is this is the conversation that USDA is having in many forms through AC21, through redoing the other 340 process for approving new GMOs and even administration-wide as they talk about the coordinated framework for how GMOs are regulated between agencies.

And I think it's really critically important that organic is in that conversation. So, we just really urge the NOSB to keep talking about this and keep elevating it to really just make
sure that there's an understanding in that conversation that the organic community is being impacted by this technology.

They are bearing very real costs and an unfair amount of the burden of trying to coexist.

So we would just encourage the process to continue and encourage the Board to be quite vocal inside the USDA and out about what it means for organic to deal with this technology.

So, to move onto another topic of the process for reviewing inerts.

To keep it short I will just say that Food and Water Watch is not supporting the proposed annotation to change how NOSB would review all synthetic inert ingredients.

And instead we think that the NOSB and NOP should implement the previous NOSB recommendation to review the inerts individually.

We're concerned about the appropriateness of shifting that responsibility to EPA. And we think that this is the NOSB's job.

So we think that we need to have a
process of notifying manufacturers and putting
requests for information out there about these
inert ingredients, developing a time-line for
review, and while working with EPA review all of
these ingredients and voting on them individually.

And then finally I'll just shift to one
specific material that I mentioned in our written
comments and that is ash from manure burning.

And ash from manure burning, I would say
that Food and Water Watch supports the
recommendation to reject the motion to remove ash
from manure burning from 205.602.

There are very good reasons listed in
the materials NOSB put out for this meeting and I
would just add one which is the role that we see
manure incineration technologies are playing in
essentially propping up excessive concentration of
livestock production in certain parts of the
country.

Food and Water Watch spends a lot of
time talking about industrialized livestock in
particular. We spend a lot of time on that in
Maryland where the big focus is the Chesapeake Bay and the tremendous concentration of chickens in particular on the Eastern Shore. There are too many chickens in that region.

And rather than deal with that core fact and the fact that they are producing too much waste to ever be used at an agronomic rate on that land, that piece of land, or even in the larger region. Instead we need technology like incineration proposed as a way to try to prop that system up and not deal with that root problem.

So there's very good reasoning in the NOSB document about how that particular material fits with the philosophy of organic inputs.

But we would just add this kind of economic motivation as well. So I'll stop there.

CHAIR RICHARDSON: Thank you, Patty. Questions from Colehour.

MEMBER BONDERA: Yes, thank you, Patty for your comments.

I at first thought I was going to ask a question sort of along the lines of Laura in terms
of how NOSB can be more functionally active with the whole GMO contamination question.

However, you went onto the inert topic. And I think that I am curious instead to ask you about one of your comments about it which is if it's the NOSB's job which I actually personally to some degree concur with, and not the EPA's, I guess my question is and the problem, and I just wondered if you have some thoughts off the top of your head is how frankly and realistically and honestly an overburdened NOSB already could be taking that on?

In what format or how could we as NOSB members actually accomplish that level of review and consideration and communication that would be necessary for all of those inert listings?

Because I think that that's one of the rationale of defaulting to the EPA. And so I'd like to hear your comments on the how part of that question. Thank you.

MS. LOVERA: Sure. Yes, we're aware of that. I don't make this recommendation lightly.
There was a previous plan, or plan of attack kind of laid out. And I think it's just a matter of starting.

I think there could be a rational way to group them together when it comes to getting information from EPA to review them, and grouping them together for some similarities. But I think each one does deserve its own note when it comes time to make the assessment of if it stays or if it goes.

And I think that there it may take a different time-line and a different process, and maybe some of the other processes like sunset take with the five-year plan.

But it just has to start. I think it's been many, many, many years of talking about how to start it, and some progress could be made if it had been started.

CHAIR RICHARDSON: Thank you, Patty. I see no additional questions and so we'll go onto the next presenter, Ronald Gonzalez. And following Ronald will be Eileen Hourihan.
MR. GONZALEZ: Hello.

CHAIR RICHARDSON: Hi, we can hear you.

Thank you.

MR. GONZALEZ: Okay, good afternoon.

My name is Ronald Gonzalez. I am the research manager of Dole Tropical Products, Pineapple Division.

I have over 10 years of experience conducting applied research to topics in production.

As you may know Dole is currently the major producer and exporter worldwide of organic pineapples and it has many years of experience producing and exporting organic pineapples to the USA and European markets.

I'd like to comment on the use of ethylene to induce flower in organic pineapples which is necessary for different reasons, some of which I would like to describe.

Pineapple farms are divided in planting blocks. Each planting block has thousands of plants. Without the use of ethylene it would not
be possible to synchronize flowering in any specific pineapple field.

As a result fruit harvest could not be planned and it would not be possible to program the fruit harvest in any field or in any week of the year.

It would be necessary to cover the whole farm and screen field looking for fruit that has reached the required physiological condition to be harvested.

It would require a tremendous amount of labor and would be substantially complicated.

As a result the cost of harvesting would increase significantly and the percent that you put rejected, not meeting market specifications would increase substantially.

It would be extremely difficult to comply with contracts regarding the volume of fruit that the farmer has to provide to the market on time which may also have economic consequences for the grower.

Not being able to comply with contracts
where the market may require transition to conventional production and that would imply an increased use of synthetic chemicals.

Pest control to flower induction would be extremely difficult and highly inefficient because there would be flower plants throughout the farm in different stages of development.

Different pineapple fruit pests attack the fruit at certain fruit phenological stages. Hence, having flower plants scattered in the fields throughout the farm would result with the attraction of different pests and greater pest pressure at all times.

Consequently the incidence of food pests would increase substantially, resulting in a much greater percentage of food rejection.

Under the recent growing conditions the pineapple plants are naturally induced to flowering between November and February in response to environmental stress factors.

There are pests during this time of year.
Without ethylene, a substantial number of plants in the farm would get induced during this time of the year, and as a result a bigger fruit would be observed between April and July, and a deficit of fruit would occur during the rest of the year.

The size of pineapple fruit is related to the size of the pineapple plant at the moment of differentiation.

Hence, if the large number of plants are naturally induced at a low plant weight, then the size of the fruit will decrease substantially and also would reduce yield per hectare.

The sum of increased harvest costs, increased fruit rejection and reduced fruit yield would make the operation non-profitable to the farmer.

Consequently --- currently, sorry, there are no non-synthetic alternatives to the use of ethylene to induce flowering in pineapples.

The efficacy of ethylene as a flowering induction agent in the pineapple is greater than
95 percent.

Ethylene is produced in natural plants. There is no scientific evidence indicating a negative impact of ethylene use on human health or on the environment.

Ethylene has been used safely for many years by pineapple growers in Latin America.

As organic pineapple growers strongly support the use of ethylene for production in organic pineapples.

And that would be my comments. Thank you very much.

CHAIR RICHARDSON: Thank you, Ronald. That was very clear. Are there questions from the Board? There is a question from Harold Austin.

SECRETARY AUSTIN: Ronald, thank you -- this is Harold -- for taking the time to participate in this opportunity for oral testimony.

In the spring we hadn't heard a great deal from the producers that are using ethylene in organic production.
With your comments we've had 42 written comments now on this round of our sunset review. And it seems to be rather obvious that there seems to be a trend towards how important this material is.

Without the ethylene for use for your flower induction, what would that do to the organic crop production in Costa Rica of the pineapple?

MR. GONZALEZ: Well, thank you very much for the opportunity.

Yes, without the possibility to use ethylene to induce flower in organic pineapple production in Costa Rica we may have to transition to conventional agriculture.

Because it would be extremely, extremely difficult and very, very expensive to grow organic pineapples.

We plant more than 65,000 plants per hectare. I don't know, something like 30,000 plants per acre.

And we would have to go looking for differentiated plants that may be scattered all
And once we identify the plant, we would have to treat it individually to protect it against fruit pests.

And then we would have to make sure that we go back to that specific plant in that specific field at the right time in order to harvest it at the right maturity -- physiological condition -- that is with the right mix, with the right fruit internal condition so that it can be exported.

And that would be a tremendous, tremendous amount of labor and logistically it would be just, I don't know, maybe impossible. It would be very, very difficult.

For us, it is crucial to be able to program the harvest because then once we know when we are going to harvest the fruit, then we generate, we design how our pest control practices and all the other practices that we have to implement -- for instance, to protect the fruit against the Sun radiation so that it doesn't get burned.

All the practices have to be
systematically programmed so that we get the right quality of produce at the end. And that without ethylene would be just extremely difficult.

CHAIR RICHARDSON: And a question from Colehour Bondera.

MEMBER BONDERA: Hello. Thank you, Ronald, for your presentation. I have a question of you regarding your role as an employee of Dole. And as you are probably aware Dole used to have its pineapple production before it moved it to Costa Rica and Hawaii. And for the sake of labor expenses decided to go somewhere where it would be less expensive.

That aside, my question regarding Dole is the fact -- and just as a side note I also produce pineapples on my farm, but not for export.

My question to you though is if you feel that Dole as a company is or should be working and supporting research into seeking non-synthetic alternatives to ethylene gas to induce ripening,
and/or is already trialing those at the field level, et cetera, et cetera.

So if you could comment on the other option besides -- like you said -- the labor and the no use, but the other things that could be used or have been tried for inducing flowering in pineapples that Dole has been pursuing or supporting. Thank you.

MR. GONZALEZ: Okay, thank you for your question.

Yes, we don't know of any alternative for flowering induction currently. A non-synthetic alternative for flowering induction, we don't know any alternative.

We do not use ethylene as a ripening agent. We go to the field and we harvest the fruit when it has reached naturally the right physiological condition, the maturity to be harvested.

We do not utilize any ripening agent, or we do not utilize ethylene as a ripening agent. We only use ethylene to induce
flowering.

And in the past, Dole has conducted research to try to find alternatives to ethylene as a flowering inductor, but we haven't found any that could be utilized in organic production.

And so basically we depend entirely on ethylene for that purpose. Not as a ripening agent, because we harvest the fruit when it gets ripened naturally --- not with an agent, for that matter.

CHAIR RICHARDSON: Thank you very much for that clear response. Appreciate it, Ronald.

I'd like to move onto the next speaker just to help us move along. We're running about 20 minutes behind where we thought we might be. But we do have plenty of time.

So just be patient for those of you that are waiting in line.

The next speaker is Eileen Hourihan, and she'll be followed by West Mathison. Eileen? Hello, Eileen, are you there? Eileen Hourihan, McCarthy Manufacturing? No? I'm not hearing
Eileen so I'm going to move on to -- hello?

DR. TUCKER: I don't have anyone from area code 708 on the line, and she did not -- her phone didn't respond to the call when we called her.

CHAIR RICHARDSON: Okay, so we'll move onto West Mathison. You would be up. And then following that there will be Rhodes Yepsen. West, are you there?

MR. MATHISON: Yes, can everyone hear me okay?

CHAIR RICHARDSON: Yes, we can hear you loud and clear. Thank you.

MR. MATHISON: Okay. Well thank you for hearing me. My name's West. I'm the president of Stemilt Growers.

Stemilt is a family-owned business and I'm a fifth generation farmer here. Stemilt is owned by -- it was started by my grandfather and is owned by the family.

Stemilt is a vertically integrated company, and we are active farmers. So we own a lot of our own farmers and we have independent
growers some of whom are guys like Gray Fuller who was Organic Grower of the Year and Mike Brownfield who holds organic certification -- either number 1 or number 2, I can't remember.

We have packing lines and a marketing company. We sell about 20 million packages of total apples, pears, cherries, peaches, nectarines and apricots, and about 20 percent of our products are organic.

The question I'd like to start out with is really more about strategy and the strategy of the group.

Because in any strategy there are tradeoffs. And those tradeoffs need to be properly stated in order to reinforce the strategy.

So for example, I hear some different strategies that I sort of -- the line of thinking that I went down.

How do we grow consumption of organics and expand the reach to more consumers, elevate the standards and protect consumers, improve traceability and maintain integrity of the system.
at its critical points.

So we're growers and we need to sell our stuff. My grandfather would say you can't have demand or grow demand unless you have supply first. Once they eat it then they'll come back.

CHAIR RICHARDSON: Calvin, you need to mute your phone.

MR. MATHISON: My grandfather started organic farming in 1989, and we hired a Ph.D. to do more research to understand how do we create more gentle practices and reduce toxicity in the system.

It's common sense now, but at the time it wasn't so common that things like good roads and reducing the dust in the orchard reduced fore-load and increase storage life without fungicide.

We changed the dunk tank water on a regular basis and balanced both the use of chlorine and monitoring the salts.

And there's a huge push on industry research around integrated pest management, where we leverage the natural systems -- for example, predator cycles, mating disruption, creating
indexes around fire lights, and other bio controls.

Of course, "bio control," the word didn't exist back then.

So during my career I've lost many organic orchards and crops due to the lack of proper controls, primarily fire blight on apples, psylla on pears, aphids on cherries, and reduced packout due to smaller size, lack of fertility, crop load management and higher defects, with russetting and coddling moss in spotted wing drosophila.

So I'm going to specifically talk about in two areas of the business. Right now it's pre-harvest, or the orchard side of the business. Then I'll talk about the post-harvest, or the packing side of the business.

We need to maintain good tools for soil health, which would be compost, natural fertilizers and inert acids.

And then pheromones to maintain -- that we need to maintain for mating disruption and to do more research in this area.

And continuing to improve the fire
blight controls that we have because it becomes a major limiting factor in what we can grow organically.

How do we find a better way to manage psylla on pears?

Also, we need to maintain the use of fish oils and fish products for improving fish oils used to improve the absorption of the material on the tree bark and the fertility for the tree.

Lime sulfur and sulfur products are very important as well as coppers.

So I'd just make a general statement around cautioning the removal of further products because many times these new products might work. However, their efficacy is not fully understood.

And the consequence is, as these items change, many times the logistics around the orchard have to increase because sometimes they aren't as efficient or effective. And you have to increase the precise management on the farm.

And so one example with the loss of microshield, it required us to buy more tractors
and more sprayers in order to cover and spray our orchards better with the replacements of microshield.

Also, this has been a difficult fact when we think about the amount of wind that we have to factor, when to spray, when not to spray.

Sometimes it rains and we are not able to get into the orchard to spray. And so even though there is efficacy with the new product, it has greatly increased the capital investment for the growers and increased the management on the farm.

This past year, we lost the use of ReTain on apples, and this helps to reduce pre-harvest drop.

This past year we had a compressed harvest from the heat we experienced in the Northwest. And on varieties like honeycrisp requires -- with the use of ReTain we've historically picked the orchard in two picks, sometimes three picks where we have to pick the ripe fruit and go back for the fruit that ripens later.
Because we lost ReTain, we had more apples drop to the ground from pre-harvest drop because we did not have that. And the only way that we can battle against that is to have more pickers. And for us in eastern Washington, we have to build more housing.

And so --

CHAIR RICHARDSON: West, could you wrap up? Because you're over the time.

MR. MATHISON: Am I over the time?

CHAIR RICHARDSON: Yes.

MR. MATHISON: So, two other quick points.

We need to maintain our hygiene for sanitation, chlorine, ozone and those types of products.

We need to explore using MCP-1 to expand the marketing window for apples and pears, and to maintain U.S.-grown organic products for longer periods of time.

And we need to research the use of methyl bromide alternatives because we have
organic equivalencies in other markets. However, our fruit has to be fumigated currently to go into some of these export markets.

And so with that, those cover the topics.

CHAIR RICHARDSON: Thank you very much, West. I should note that the bell was so quiet I could barely hear it, Jenny. So, you might have to make it --

DR. TUCKER: We'll turn up the volume on the bell. But if it sounds like the speaker isn't hearing it, we will politely jump in.

CHAIR RICHARDSON: Okay, great. Thank you.

Harold, question?

SECRETARY AUSTIN: Thanks, Jean. West, thanks for your presentation. I know your family has been a long part of organics in the Northwest, and we're grateful for the high mark that you set for the rest of us to try to follow.

You mentioned the need to protect the materials -- white pine sulfur, copper, sulfur
pheromones, that type of stuff.

aren't those materials that even prior

to the founding of the NOP, materials that your

grandfather and your father were using in their

organic crop production?

And aren't they still just as important
today, or are they as important today as they were
back then?

MR. MATHISON: Well, they've become

more important with the loss of other products.

And also we've become better at using

them and when to use them. I think that's the other

piece of the research that we're -- we're trying
to use them less and not as broad, but really

finding the timing so they have better efficacy.

So it's become more important.

SECRETARY AUSTIN: Jean, one more

quick one.

CHAIR RICHARDSON: Okay.

SECRETARY AUSTIN: West, also,

organics versus conventional. With the Food

Safety Modernization Act coming in, how
significant are the sanitizer --, the various sanitizers you were beginning to mention earlier -- how significant of a role are those going to play in organic crop production and also at the warehouse for handling?

MR. MATHISON: Yes, so for the Food Safety Modernization Act and the new technologies for studying the microbial loads and the presence of items like listeria on packing equipment, the technology has increased.

And so the actual detection of things like listeria has gone way up because now we can see it better.

So we have to have these types of sanitary tools in order to properly clean our packing line equipment.

Because with the amount of monitoring and record-keeping and enforcement, when you take a product that's grown outside and then you store it for a period of time, then run it across the packing line, it has a bio load on it that has to be reduced.
And the only way that we can get the lines clean are with these items like chlorines, and ozones, and hydrogen peroxide, and using phosphoric acid for bussers is extremely important.

There are no substitutes for those items.

CHAIR RICHARDSON: Great. Thank you very much, West. That was very clear.

Our next speaker is Rhodes Yepsen. And he'll be followed by Amber Pool. Rhodes, are you there?

MR. YEPSEN: Yes, I am. Can you hear me?

CHAIR RICHARDSON: Yes, thank you.

MR. YEPSEN: Hi, this is Rhodes Yepsen, and I'd like to comment on the sunset of plastic mulch and covers.

I'm the recently appointed executive director of the Biodegradable Products Institute, or the BPI.

The BPI is a not-for-profit association

with the mission to promote the production, use and appropriate end of lives for materials and products that are designed to fully biodegrade in typically biologically active environments such as composting.

There are known alternatives to conventional plastic mulch, including biodegradable mulch films, which as of September 30, 2014, is on the National List.

Such mulches are available today; however, confusion has resulted due to the NOP policy memo 15-1.

The Crops Subcommittee has been asked by the NOP to review the policy memo regarding biodegradable biobased mulch film and to clarify the recommendation approved by the NOSB regarding the use of such mulch films in organic production.

Biodegradable mulch films that were petitioned are biobased products. In other words, they do have some plant-based content, and the biobased content can be determined using the test ASTM D6866 method to provide transparent
information about the product.

The mulch films that are currently available on the market have a minimum of 10 percent biobased content, which is an improvement over the current use of 100 percent fossil-based plastic.

But more importantly, these mulch films must meet the soil toxicity and biodegradability requirements as required by the USDA organic regulations.

In other words, they break down safely into carbon dioxide in water and soil.

The origin of the material has no impact on biodegradability. In other words, microorganisms in the soil will treat a biodegradable mulch film the same whether it is 100 percent biobased or 10 percent biobased.

Polyethylene mulch that is currently allowed in organic production has numerous problems, namely that it breaks into small pieces that are left in the field, and the bulk of it must be removed and sent to landfill at significant expense to farmers and the environment.
Biodegradable mulch films eliminate the labor of removal and sending discarded plastic mulches to landfill, as well as environmental harm from broken pieces of plastic remaining in fields and surrounding areas.

Farmer comments to the NOSB in 2012 strongly supported use of biodegradable material, and the NOSB agreed that a crop production material -- as a crop production material biodegradable mulch film aligned with organic principles and National List criteria.

However, the material that ultimately was approved did not reflect the material that had been petitioned or evaluated in the technical review.

The petition was for biodegradable mulch film made from bio-plastics, not biodegradable biobased mulch films.

BPI had supported the annotation included ASTM D6866, which is the standard for determining the content of biobased material as a condition for compliance.
However, this standard does not contain a definition of biobased material, nor does it require a minimum amount.

The NOP memo published in January 2015 was issued to clarify NOSB recommendations --

(Telephonic interference.)

MR. MATHISON: -- in other words entirely from plant material.

These petitions disregarded the fact that there is no biodegradable mulch film commercially available now or in the foreseeable future that can meet those requirements.

It also disregarded the definitions that are included in the USDA organic regulations.

Interpretation that it must be biobased equates to 100 percent carbon-based material derived from renewable resources via biological processes exceeds the National List criteria, as well as the content of the petition and its technical report, the support of public comments for the use of biodegradable mulch film and also the principle of continuous improvement in
production practices and materials.

We submitted a recommended change to the Crops Subcommittee in the written comments, and I welcome your questions and concerns. Thank you.

CHAIR RICHARDSON: Thank you, Rhodes. Have you also submitted the comments that you just read? Have you also submitted those?

MR. MATHISON: Yes, a version of those.

CHAIR RICHARDSON: Okay, good.

Great. Because the detail is -- the devil is in the detail as we know. So that was good.

MR. MATHISON: Yes.

CHAIR RICHARDSON: Thank you very much. I don't see any specific questions for you, but I do note that I ought to have announced the names of all of the Board members who are sitting in on this call listening. I mean, not everybody's asking questions, but they're all listening.

So, Jenny, could you read that out for me, please?

DR. TUCKER: Sure. So, here’s the tally of folks who are on the line. These are all
the Board members.

We have Ashley Swaffar, Carmela Beck, Colehour Bondera, Francis Thicke, Harold Austin --- we just heard from Jean Richardson -- Jennifer Taylor, Lisa de Lima, Tom Chapman, Tracy Favre and Zea Sonnabend.

CHAIR RICHARDSON: And Calvin Walker.

DR. TUCKER: I'm sorry; Calvin Walker is also online.

CHAIR RICHARDSON: Great. Thank you very much.

DR. TUCKER: Thank you.

CHAIR RICHARDSON: And thank you, Rhodes. Our next speaker is Amber Pool, and she'll be followed by Marni Karlin.

MS. POOL: Hi, good morning. This is Amber. I'm a senior farm certification specialist at CCOF; I've been certifying organic farms for nine years now for CCOF.

And I just wanted to thank you guys for doing this webinar. I'm really enjoying this format and I can really hear everybody's comments
clearly.

This is really great because I wouldn't have been able to do oral comments without this format. So thank you.

I wanted to say that CCOF supports the annotation change that references the EPA list for inerts that no longer exist.

We have a lot of members who use registered pesticides that contain inert ingredients.

And most of our growers and livestock producers who are using these materials, they have no idea that they're using materials with inert ingredients.

They're relying on organizations like CCOF and OMRI to review these materials. So they don't know and so that's why you haven't probably heard from a lot of the organic farmers who are using pesticides.

Since I started nine years ago, I've just seen so many new organically-approved pesticides come on the market.
And so we support an annotation change that would ensure that only the safest materials are approved for use in pesticides for organic crops and livestock.

We also have a concern that any changes cause minimal disruption to our organic producers.

It takes a long time for these pesticide companies to get products tested and approved by the EPA, so we would like to see a long phase-out period so the people don't lose these tools that they rely on.

I was able to come to the April meeting, and I saw the presentation on the Safer Choice Program. And I really enjoyed that and I found it really interesting.

I do have some concerns about basing our reviews off of another program's reviews, especially since this was more of consumer products instead of agricultural products.

So I think it could work but it would take some careful vetting and thorough review.

And if you guys have any other questions
about our organic growers or their use of pesticide with inerts, I'm happy to answer any questions. Thank you.

CHAIR RICHARDSON: Thank you, Amber. I am not seeing any questions, and so thank you for your presentation.

MS. POOL: Thank you.

CHAIR RICHARDSON: And we'll move onto the next speaker which is Marni Karlin, and she'll be followed by Allen Widman.

And I note that Eileen Hourihan has been able to join the conference now. Eileen, I'll put you on towards the end; I hope that's okay. Thank you.

And so let's go to Marni.

MS. KARLIN: Hi, thanks for the opportunity to comment. Can you all hear me?

CHAIR RICHARDSON: Yes.

MS. KARLIN: Great; thanks. My name is Marni Karlin. I'm with the Organic Trade Association. And like I said, I appreciate the opportunity to comment in advance of the meeting.
Unfortunately, I won't be able to join you all in Vermont, and so I'm very pleased to be able to join you all here in this webinar.

I'd like to begin by saying that OTA supports the work that the NOSB has done and continues to do on classification.

And we very much appreciate the competence and professionalism NOSB brings to the task.

Based on the information provided in the technical review for each material, and NOSB's draft guidance on classification of materials, OTA agrees with NOSB's assessment that alginic acid should be classified as synthetic, and kanaba wax should be classified as agricultural.

We'd like to raise just a side note of caution. We are uncertain about the urgency to move to reclassify both of these substances at this time.

We would like to point out the risk of making such a determination based on draft rather than final guidance.
And we're concerned that such action may result in getting out too far ahead of NOP.

To be clear, this concern does not relate to any of the work the Board does in response to petitions or the sunset materials, but solely when the Board initiates determinations based on draft guidance.

OTA recognizes that NOSB is actively and regularly making classification decisions, and in doing so must use the best information available in a timely manner.

In other words, NOSB cannot and should not put its work on hold until NOP finalizes the guidance and classification of materials.

NOSB must respond to petitions, sunset requirements and requests from NOP in a timely manner, and the use of draft guidance is appropriate in these areas.

OTA also acknowledges the good work the subcommittee has completed in drafting these proposals, and we're not suggesting that these proposals be tabled.
We largely agree with NOP's draft classification of materials, and in the case of alginic acid and kanaba wax, we believe the classification decision is fairly straightforward.

However, going forward, we believe it would be prudent to hold off on NOSB-initiated reclassification activities until final guidance is issued.

This would eliminate the potential need to engage in rulemaking to correct a decision that was made according to draft guidance, but then differs from the ultimate determination made under final guidance.

And I'd like to make clear that in situations like this the Board can and should make sure NOP knows the organic sector needs a particular guidance to be finalized.

The Board can put appropriate pressure on USDA to complete its work so that the Board can continue to do its work and allow the organic sector to continue to thrive and grow.
I'd also like to make one additional slightly unrelated comment.

I'd like to acknowledge the release of the updated NOSB Policy and Procedures Manual.

OTA very much appreciates the work the Board has done on this. It's very important to have established procedures that are transparent, both for the Board and all stakeholders in the organic sector. Thank you.

CHAIR RICHARDSON: Great. Thank you very much, Amber. It was very clear and very helpful. I don't see any questions on my screen, so thank you.

Sorry you can't come to Vermont. But you know it will be raining and snowing by then, so just stay where it's nice and warm. Marni, thank you.

The next speaker is Allen Widman, and he'll be followed by Hilda Tovar. Allen, are you there?

MR. WIDMAN: I'm here. Can you hear me?
CHAIR RICHARDSON: Yes.

MR. WIDMAN: Thank you. My name's Allen Widman; I'm an organic grain farmer in Washington State.

I'm presenting today because I need your considered opinion for guidance on the Washington Department of Agriculture's organic program with respect to a liquid fish fertilizer I would like to use on my farm.

I feel the product is aligned with the spirit of organic production in that it's nutrients cycled from the ocean, not the Haber-Bosch process, and is approvable under the allowed synthetic exemptions of liquid fish products.

Its guaranteed analysis is 400. The nitrogen is in the molecular form of ammonium sulfate.

It only differs from already approved liquid fish product in the manufacturing process, but not input sources, reaction, or molecule.

This product is captured condensate from heated fish emulsion, where the ammonia in the
emulsion is evaporated and condensed via a temperature gradient in the use of sulfuric acid, which also serves to pH-adjust the product and stabilize it from microbial growth.

The questions to be answered in short form: are there limits to reactive molecules in liquid fish products as a result of acid addition? In this case, is ammonium sulfate allowed? Further, are liquid fish products limited to fish emulsions and hydrolysates, or can they also be derived from them?

The following emails help to clarify the input needed. The first was between myself and Sam Schaeffer; he was the input coordinator for the WSDA organic program.

And he says, "Hi Allen, I don't want to reveal any confidential information regarding Ocean Protein's process, and I'm not sure how much they have shared with you. But suffice it to say the conversion of ammonia into ammonium sulfate is not allowed as it is a chemical change not mediated by an enzyme or within a living organism."
And I responded, "I have to take issue with your decision. The most recent review of liquid fish products for use in organic production states, 'Liquid fish products include fish emulsions and fish hydrolysates --- also called fish hydrolysates. There is no language that liquid fish products are exclusive to fish emulsions or fish hydrolysates. The 400 fertilizer is composed entirely of liquid products from fish, with the exception of sulfuric acid."

"Sulfuric acid is clearly alliterated in the NOP allowed synthetic list. Also, the most recent review approved legal uses of substance. Liquid fish products are currently on the National List as synthetic substances allowed for use in organic crop production.

"In response to your assertions that when captured ammonia is transformed into ammonium sulfate it becomes synthetic, no longer allowed in organic production, and conversion of ammonia into ammonium sulfate is not allowed as it is a chemical change not mediated by enzymes or within living
organisms.

"Note the specific conversion already happens in liquid fish products that are approved organic.

"Both physical process and temperature and pressure, as well as acid pH adjustment, induce a myriad of chemical reactions in liquid fish products that are not mediated by enzymes or within living organisms.

"This is pointed out in the most recent review itself. Note, the evaluation questions to be used for organic crop production," and then I listed the three questions and their answers.

It didn't change his opinion of his denial, so I went to Brenda Book, who's the director of the WSDA organic program, and she responded, "I've looked into your issue for you. We have also consulted with the USDA National Organic Program regarding the decision that was provided to you.

"Based on the information we have been provided and input from the USDA, our program's response was accurate."
"Although the WSDA program has approved the use of different fish fertilizers, we have not previously approved the use of ammonium sulfate fertilizers.

"As a USDA-accredited certifying agent we must strictly follow the USDA regulations regarding which substance is allowed in organic production.

"Ammonium sulfate is not on the list of allowed substances in organic crop production and is not referenced in the technical review of liquid fish products used by the NOSB when they made their recommendations to allow liquid fish products in organic production."

And it goes on, but my response was, "Thank you for your response. I get the idea that this product will not be approved through the WSDA.

"It should be noted though that all liquid fish products that are approved organic by the WSDA and are pH-adjusted with sulfuric acid are ammonium sulfate fertilizers.

"The NOP list for approved synthetics
does not enumerate any reactive molecules from pH adjustments in liquid fish products.

"When reactive with phosphoric acid, ammonia in fish becomes ammonium phosphate. When reactive with sulfuric acid magnesium in fish becomes magnesium sulfate, et cetera.

"It is in my opinion arbitrary and poorly reasoned to pick one molecule that is already approved in many other organic products and the result of the same chemistry and source and then deny it in this case."

And so that's my basic question to you, is: are there limits to the reactive molecules, and should this substance be considered a liquid fish product and exempted under the already exemption for liquid fish products?

I guess I need some input, not necessarily a rule or anything, but some guidance for the WSDA because it is a new substance in the manufacturing process. So, thank you.

CHAIR RICHARDSON: Thank you very much, Allen. Right on time. And do you also have
these comments in written form that you've submitted as well? Because that would certainly be the most reasonable way in which the NOSB could provide you with any kind of feedback.

MR. WIDMAN: Yes, I sent those in.

CHAIR RICHARDSON: Okay, great. So we will certainly look at those comments and think about what the best way is to handle them. Obviously I can't suggest any kind of response here on this call.

Thank you for the comments. I don't see any specific questions, so I would like to move to the next speaker, Hilda Tovar. And Hilda will be followed by Amelie Hayte.

Hilda, are you there? Hilda Tovar from Berrymex had some comments for the Crops Subcommittee I see from the notes.

DR. TUCKER: She is online with a headset. Hilda, is your computer on mute?

It shows Hilda's online with a headset. So Hilda, can you hear us, and can you try getting off mute if you're on mute on your computer? If
your computer volume is off.

CHAIR RICHARDSON: Hilda, can you hear us? No luck.

DR. TUCKER: She's calling internationally, so that may be the --

CHAIR RICHARDSON: Ah, okay.

DR. TUCKER: Maybe we should try again later.

She just chatted in that she can hear us. Hilda, we cannot hear you so please check the mike on your computer to see whether the input part of your microphone is working. Because I'm assuming you're using voiceover computer.

CHAIR RICHARDSON: She says it's working. I can see her written words, but I can't hear her. And she is on her computer.

DR. TUCKER: For some reason, Hilda, your input mic is not working. So I'm not sure how to help you troubleshoot that, unfortunately.

If I can suggest perhaps that we go onto the next commenter and then we come back to Hilda after the next commenter, give her a little bit of
a chance to troubleshoot.

Hilda, you may want to contact ReadyTalk during the next couple of minutes here. Their technical support is actually quite good if you're able to reach them.

CHAIR RICHARDSON: Hilda, we'll hope that you can get in later. And so I'll turn now to Amelie Hayte. Amelie, are you there?

MS. HAYTE: Yes, I'm here, thank you.

CHAIR RICHARDSON: Okay, great. Off you go. I can hear you.

MS. HAYTE: Okay. So this is Amelie Hayte with GNT USA.

First I'd like to thank the Board for taking the time to review the colors that are currently listed on the National List.

So, GNT is a manufacturer of colors from fruits and vegetables. And back in 2007 we petitioned for most of the colors that were listed on the 205.606.

And today we're commenting in support of relisting various colors on the National List.
I'm going to list them - beet juice extract, black currant juice color, black and purple carrot juice color, blueberry juice color, carrot juice color, cherry, chokeberry, elderberry, grape, pumpkin, purple potato, red cabbage, and red radish extract for color.

So first, since we petitioned these colors in 2007 GNT has been able to develop organic colors. And we currently offer organic colors made from black currant, black/purple carrots, regular carrots, elderberries, pumpkins, and red radish.

So those type of raw materials help to give colors that are red, purple, orange and yellow.

So even though some of the colors are now available as organic there are still some challenges that are associated with organic production.

The first challenge is that organic colors are still available in limited quantity.

And just as a reminder GNT does not
source fruit and vegetables from the open market. So we use special varieties that are grown and harvested specifically for color.

So, most of our raw materials are actually grown within 150 miles from our factory. And so there are a limited amount of organic fields and organic farmers.

Additionally, the organic fruit and vegetables do not have the same quality as conventional fruit and vegetables. And the quality of our raw material is directly affecting the quality of our colors.

So for example, organic colors are not as concentrated as the conventional colors and the organic colors do not work in all applications.

Finally, the organic colors that we offer are only available in liquid form. And so we feel that removing colors from the National List would prevent the industry from using conventional colors that are available as all-soluble, for example, or in powder form.

That would affect some segments of the
industry like powder drink mix, snacks, seasonings and tablets just to give a few examples.

So for these reasons we would like to relist the colors. We recommend to relist the colors on the National List.

And then as a side note we were also wondering if the Board decides to relist the colors or any of the colors if it would be possible that the Board recommends that the CAS number assignments are removed from the National List because those don't really apply to colors made from fruits and vegetables.

CHAIR RICHARDSON: Very good. Good comments. Very useful. Have you also submitted these in writing, Amelie?

MS. HAYTE: Yes, we did.

CHAIR RICHARDSON: Okay, good. That's always helpful when we're trying to look through all the materials as we are voting and reviewing the materials.

I don't see any specific questions coming up on my computer at the moment. So I thank
you very much for your comments. They were very helpful and I also look forward to reading your written comments as well. Thank you.

The next speaker we have is Pamela Saunders. And Pamela will be followed by Brian Lehmann. Pamela, are you there?

MS. SAUNDERS: Hello.

CHAIR RICHARDSON: Hi, Pamela. Yes, we can hear you, Pamela. Now we can't hear you. Pamela Saunders from CROPP we cannot presently hear you except your initial hello.

MS. SAUNDERS: Can you hear me?

CHAIR RICHARDSON: Yes, now I can hear you. Yes.

MS. SAUNDERS: Okay, thank you.

CHAIR RICHARDSON: Okay.

MS. SAUNDERS: I appreciate this opportunity to address the full Board as I won't be able to be in Vermont.

This is Pam Saunders. I am representing the organic meat company Organic Prairie which is a wholly owned subsidiary of CROPP.
cooperative Organic Valley.

And our written comments address a whole range of issues in detail.

I'm going to take this time though to kind of give a broad overview of how we got to where we are in regards to celery powder.

And it's up for sunset review, as you know. We appreciate the Handling Subcommittee's recommendation to relist celery powder.

The petition originally in 2007 anticipated that we have an issue of scale and quantity. After all, there was organic celery and there would be more, right?

But we really didn't anticipate that there would be technical issues with the growing of an organic crop for the use in processing meat.

At that time, the alternative curing of meat was in its infancy. And use of the naturally occurring nitrates in vegetable powder which are converted by the use of a lactic acid starter culture to nitrites which are an alternative to sodium nitrite and sodium nitrate. Those things
are not allowed in organic processing.

By the way, they are allowed in European standards, but not in U.S. standards.

So, since that infancy in alternative curing our process has become much more standardized with predictable and acceptable results for the consumer.

I would say that everyone has been doing their due diligence in those years since 2007.

We reached out to every kind of dryer and juicer of organic celery and other vegetables.

And we, of course, continued to query our suppliers of conventional celery on an annual basis as required, showing a growing but really still a small industry demand.

And in the meantime those suppliers were doing their due diligence in trialing organic crops.

You'll be particularly interested to review Kerry Ingredients' comments which kind of details the results that they got from trialing organic crops.
I believe there were upwards 20 different crops trialed in these intervening years by Kerry Ingredients and Florida foods who are the two main suppliers of meat processors in the U.S.

The challenges fall down to this. It's really about nitrate content in the organic crop.

And without a high enough nitrate content you can get unwanted color and flavor, and you might not accomplish the cure without a high enough nitrate content.

So, really, we've used the last seven years to take advantage of this developing alternative cure, to grow a market which has grown to somewhere between $150 to $200 million to build a cured organic meat, processed meat business. We're growing at double digit rates.

And meeting consumer expectations in regards to not just color and taste, but also in regards to food safety and shelf life.

So, how would we use another five years if we've already had these seven or eight years?

And I think that we're in a special
moment. Laura Batcha in her comments a little while ago referred to the industry group for -- a working group on innovation and that they were taking on the celery powder challenge as their first project.

We've been working with our competitors and with our suppliers. And those will be the people who are working in this working group.

I've reached out to a number of agronomists and plant scientists and researchers who are actually pretty enthusiastic about this project.

And it's clear that not all avenues have been exhausted.

I'll just give you one example. I spoke with an ARS researcher, Eric Brennan, in California.

And he's working on a project that addresses the problems that we potentially could turn into an opportunity.

And that problem, he is growing cover crops to scavenge and absorb the excess nitrogen
from organic vegetable crops.

Is that the bell?

DR. TUCKER: Yes, sorry.

MS. SAUNDERS: Okay. Let me just finish this example for you.

And so he's going to be juicing and assessing the nitrate content of those cover crops. And we're going to be able to look at that and see if that's got potential of turning that excess nitrogen problem into an opportunity if that substance can be used for curing meat.

And that's not the only thing. That's not proven, but it just shows that there are --

CHAIR RICHARDSON: I do have a question for you coming up, Pam, that might help you to expand your comments without taking more of the five-minute allotment.

MS. SAUNDERS: Let's do that.

CHAIR RICHARDSON: Tom Chapman has a question for you. Tom.

MEMBER CHAPMAN: Can you guys hear me?

CHAIR RICHARDSON: Yes, reasonably.
MEMBER CHAPMAN: Okay. Pam, thanks for your comments.

Can you help me understand what's the necessary nitrate content in celery powder to achieve the cure and how it compares to organic celery powder?

MS. SAUNDERS: I can't be real specific. The product that we use now is standardized to, I believe it's 15 to 20 parts per million.

And I think that the crops that have been tested have been well below 50 percent of that.

But they tested organic crops I believe without really trying to enhance through soil amendment, possibly other kinds of perhaps foliar applications.

They didn't select in particular for varieties that might have a higher nitrate uptake.

So that's why we think this area, the potential has not been exhausted in this area's possibility for getting an organic product that would have a functional quantity of nitrate.

And of course without causing excess
nutrient runoff in the form of nitrate and phosphorus, like from the over-application of manure.

So it's a complex matrix of issues that can be explored including varietals, including cropping methods, and including potential scavengers of nitrogen.

CHAIR RICHARDSON: Francis Thicke has another question for you.

MEMBER THICKE: Are there alternatives to nitrate for curing meat?

MS. SAUNDERS: Well, we use vegetables because vegetables are naturally high in nitrate. In fact, from a dietary standpoint vegetables are the highest source of nitrate in our diet.

There is sodium nitrate, potassium nitrate, neither of which is allowed in organic. So, vegetables are the logical choice for exploration, unless we go down the path of allowing sodium nitrite.

MEMBER THICKE: I guess I wasn't
totally clear. I was asking if there are alternatives to nitrate, something besides nitrate for curing meats.

MS. SAUNDERS: There's salt curing which there are some minimal nitrates that occur in sea salt.

And there are other kinds of dry curing methods. But there aren't alternatives for the products that we're used to eating like hot dogs, pepperoni, all that kind of product.

CHAIR RICHARDSON: Thank you very much for your comments, Pam.

Have you also submitted these in writing?

MS. SAUNDERS: Our written comments are more detailed than what I've just given you and really address the size of the industry. They address human health impacts. And they address particulars about what the working group is going to try and accomplish.

CHAIR RICHARDSON: Very good. Thank you for your comments.
The next speaker is Brian Lehmann and he'll be followed by Katherine DiMatteo. And then we'll work on fitting Eileen back in and we're going to try still to get Hilda Tovar as well.

DR. TUCKER: Can we do a very quick test? Hilda, if you are on the line can you just say hello just so we can see if we have solved your problem?

MS. TOVAR: Yes, I am.

DR. TUCKER: You are. Okay. So Hilda, we'll pick you up after -- we'll actually call on you when we're ready, okay?

MS. TOVAR: Okay.

CHAIR RICHARDSON: Okay, we'll let Brian Lehmann talk and then let's just fit Hilda in right after that before Katherine as long as that's okay with Katherine.

So, over to you, Brian.

MR. LEHMANN: Okay. Can you hear me?

CHAIR RICHARDSON: Yes, I can hear you.

MR. LEHMANN: Good afternoon. I'm Brian Lehmann commenting as an organic consumer.
I know that the ad hoc subcommittee has looked at proposals in recent years that in some way have involved testing for purity of seed in organic.

I also feel that USDA and NOP have pushed back against NOSB since this effort towards seed purity was undertaken with various unilateral actions such as revisions and sunset rules, agenda-setting and chairmanship of NOSB meetings.

And the current proposal is for a best management practice for verification of non-organic seed.

But as a consumer I feel cheated. I have no assurance that certified organic products, particularly corn and papaya, are free from unwanted GMO contamination unless that product is also verified with Non-GMO Project or other independent means.

But even then there's still a level of no more than 0.9 percent GMO. Even if we had mandatory testing some level of degradation to the organic seal would likely already have taken place.
under purview of USDA.

But in reality many providers of certified organic products don't bother with non-GMO verification.

So a consumer is really left in the dark.

A given company's customer rep is probably not going to be able to tell me what batch of corn a particular product came from much less what level of contamination was found or not found unless, as I said, the product carries non-GMO verification as well as organic certification.

But USDA just simply is not making it easy to know what's going on. In 2014 Food and Water Watch and OFARM released a report indicating over 50 percent of respondent corn and soy farmers had experienced rejection of loads for unwanted GMO contamination at significant cost.

A more recent USDA census on agriculture found the value of organic crop loss from unwanted GMO contamination exceeded $66,000 per farm.
But while these efforts expose a serious problem they don't necessarily alleviate concerns for the consumer marketplace.

Biotesting is the main source of discovery of unwanted GMO contamination. But it doesn't tell me if loads intended for the domestic market are tested to the same exacting standards and product destined under contract to an overseas market, or even whether a load rejected by one buyer can still find its way into the organic food supply.

With reports of contamination as high as 17.5 percent in the Food and Water Watch report, for example, and maybe it just winds up as feed, still I believe the problem is so critical as to require inspection of USDA certified organic corn under 7 CFR Part 205.670(a) more than under (b) or (c), or in other words, for cause.

At the same time USDA has not seen fit to establish a level of unwanted GMO contamination which would be considered unacceptable in USDA certified organic.

Obviously this must be done. While the
commonly accepted standard of 0.9 percent does
represent a certain level of encroachment already
it should not be exceeded under any circumstances.

If coexistence is as feasible as USDA
claims this modest level of protection should not
be a burden.

But if we're to maintain a process
standard, if unwanted GMO contamination is then
found to exceed established levels it must become
the responsibility of the offending patent-holder.

But if USDA will not protect the organic
seal under its purview it risks exposing it as
fraudulent.

Thank you for the opportunity to
comment and I just wanted to say if I seem to preach
the choir, excuse me; if I seem to preach the choir.

But I just wanted to register a certain
level of dissatisfaction. So thank you.

CHAIR RICHARDSON: Yes, thank you very
much. Yes, you may well be preaching to the choir.
Your comments on this very complex and serious
subject are appreciated.
I don't notice any specific questions for you but I know we will continue working on this topic, Brian. Thank you.

I would now like to see if we can patch in Hilda Tovar of Berrymex on her international call. Hilda, are you there?

MS. TOVAR: Yes, I am. Can you hear me?

CHAIR RICHARDSON: Yes, I can hear you.

Yes.

MS. TOVAR: Okay. Thank you for your time and I apologize for the inconvenience.

I'm Hilda Tovar. I work in the continuous improvement of food safety area for Berrymex of Mexico. I'm representing the central Mexico and Baja facility and I really appreciate this opportunity to talk to you.

The comment that I submitted was regarding several items that you are proposing to remove from the 205.601.

(Telephonic interference.)

CHAIR RICHARDSON: Some folks mute
yourselves out there. We can hear lots of conversations. Thank you. Please continue, Hilda.

MS. TOVAR: I am asking you to consider the permanence of products in the pest control area, disease control area, nutrition, disinfection, weed control.

I can give you a lot of examples of the explanations why keeping those.

But as a general I want to put you in context, I know you don't know where we are growing our berries.

We are growing our berries in central Mexico. That includes Jalisco, Michoacan states that are in the center of Mexico and also up north in Baja, California.

We have different weather conditions in both sites of production. And we need to have wide always available material.

Due to the weather conditions and also the location the farms that we have in Baja, California are 178 miles from Tijuana.
So when we are running off one of the products or substances that we are using, or materials that we are using in the regular production process or farming process it is quite complicated to get another.

And also we have to be careful with the environment.

For example, one of the options that we are discussing keeping or removing is the plastic mulch cover.

Right now we are using it as weed control. You know that the weed control is mechanical, mainly mechanical. This involves a lot of people and right now we have a scarcity of people. It is a difficult environmental, labor environmental in Baja.

In central Mexico we start experiencing lack of people to do these activities. So the plastic mulch cover are big help for us.

And we have integrated into our company a recycling program. We are making sure that all the plastic -- not only the plastic mulch that we...
are using in our production are properly transformed into something else and are not just left in the environment, polluting the water or the soil.

For soil amendments we are asking you to consider keeping elemental sulfur and micronutrients, and liquid fish products just as a help.

We have mainly in Michoacan very stony ground. And they are poor and difficult to get all the nutrients that the crops are needed. And you are expert on the matter so I don't have to go deeply to explain why we are needing all these products available.

And regarding disease and pests, we would like to keep the hydroperoxide, the lime sulfur, the oil, the copper sulfate, the copper and potassium bicarbonate to have like a rotation.

We know that it doesn't create resistance, but it is also availability from more suppliers, especially in the north, up north. Sometimes we don't have everything we want from our
suppliers, or they take too much time to get in too.

And we are trying to have an integrated pest and disease management based on the monitoring, trying to apply or to handle the pest and diseases as they are presenting these as prevented as possible. That's why we would like to keep the pheromones.

It is a key part to monitor the pest population that we have in our crops.

Also, if the pheromones are without effectiveness we dispose them correctly. We have to comply by condition and by law that we cannot pollute our environment. Thank you very much.

CHAIR RICHARDSON: Thank you very much, Hilda. Right on time. Good job.

And just a question from me. Have you submitted these comments also in writing?

MS. TOVAR: Yes. We didn't submit the distribution. As I told you, I can provide it if you need it.

CHAIR RICHARDSON: Yes, because you did have a long list of materials which we will be
considering and so it's very helpful for us to know how many producers and farmers are using these materials as we make our decision.

MS. TOVAR: Okay.

CHAIR RICHARDSON: Thank you.

MS. TOVAR: Thank you.

CHAIR RICHARDSON: I don't see an additional question at the moment from the Board members, so I'd like to turn next to Katherine DiMatteo. And then she'll be followed by Eileen Hourihan. Katherine?

MS. ARSENAULT: Jean, if I could just interrupt for one second. This is Michelle. Hilda, if you would like to email that to me that would be great.

MS. TOVAR: I will do it. Thank you.

CHAIR RICHARDSON: So, the person that just spoke Hilda, that's Michelle Arsenault. And I'm assuming that you have her phone number as well as email. So she's asking you to send the comments that you just made so that we have that list of materials that you're interested in. Okay, thank
you.

Now, over to Katherine DiMatteo.

MS. DIMATTEO: Thank you. Can you hear me?

CHAIR RICHARDSON: Yes, we can hear you.

MS. DIMATTEO: Great. I am Katherine DiMatteo. I am a partner in the consulting firm Wolf, DiMatteo and Associates. We've been providing advice and service to the organic sector for over 25 years.

Thank you for the opportunity to comment, for setting up these webinars that allow more participation in the NOSB process and for your dedicated work as volunteers to maintain the integrity of the organic sector and encourage its growth and continued improvement.

We have submitted written comments and my comments now reflect what we have submitted to you already.

We have four points that I will be talking about supports the proposed work of EPA to replace the list for inerts with EPA's Safer Choice
The plastic mulch and biodegradable mulch films on the National List, natural sodium nitrate and its lack of prohibition to date, and the rationale for sunset renewals and removals.

List for inerts. We urge the NOP, EPA, and NOSB to proceed quickly with this proposed list and ensure compliance with the requirement of the Organic Food Protection Act and the rules that apply to human safety and effectiveness of organic pest control materials.

We especially encourage you to avoid unnecessary duplication of relisting inert ingredients.

Regarding the mulches, we do not oppose the continued listing of plastic mulch.

We urgently request though that the currently available biodegradable mulch films which meet the National List criteria and definitions in the NOP regulations be allowed for use immediately.

To accomplish this the NOP policy memo
15-1 will need to be corrected to match the actual language of the regulations.

Our understanding of the NOSB discussions on the vote to add biodegradable mulch to the National List with a biobased constant would be required and the content would be tested and reported.

No minimum content would be required at this time.

The policy memo in January of this year restricted the biodegradable biobased mulches to only those that are 100 percent biobased of which there are none available currently nor are there any expected to be available in the near future.

To your original petition for biodegradable mulch film the supporting documentation and the industry technical review indicated that some petroleum products are part of the production process.

As a matter of fact, many materials on the National List of allowed synthetics are derived from petroleum products and the biodegradable
mulch films should not be treated differently.

Petroleum-based plastic mulch will petition for the first time and compare to the alternative biodegradable bio-plastic mulch films that are available it would be obvious that the biodegradable bio-plastic mulches are significantly better choices for organic production when the manufacturer, content and impact on the environment are compared.

Natural sodium nitrate. According to the recommendation of the NOSB the annotation for the use of sodium nitrate was to sunset in October of 2012, but there has not been rulemaking to this effect.

Since the Secretary has not taken action in five years then shouldn't sodium nitrate and its annotation have been considered during the 2017 sunset review?

We urge the NOSB to request that a proposed and final rule that reflects the petition of 2011 be published prior to October 2017.

This silent allowance of sodium nitrate
has --

(Telephonic interference.)

CHAIR RICHARDSON: Okay, I don't know what's going on but I have an ad coming on.

DR. TUCKER: Hi, this is Jenny. If you can still hear me I'm going to try and un-mute the person who was speaking.

I apologize. Somebody put us on hold and when that happens everyone gets to listen to the hold music.

So Katherine, I've now un-muted you. Please go ahead and try and speak.

MS. DIMATTEO: Okay. Can you hear me?

DR. TUCKER: Yes. Apologies for that. Now we can hear you but no one else. So I'm going to have to take people off one by one as it's time for you to speak.

So please don't go on hold, anybody. That's a lesson for the day. Katherine, please go ahead.

MS. DIMATTEO: Okay. So, I was speaking about sodium nitrate.
I was about to say the silent allowance of sodium nitrate has caused an unfair situation and competitive disadvantage for the input companies and the growers who are honoring their April 2011 recommendation vote of the NOSB to prohibit.

Lastly, the National List is part of a toolbox for organic production and handling. Amending the list or making it shorter or smaller is not automatically a goal or likely to be helpful to the organic community in the long run.

The decision about whether something should be on this very small list of synthetics for non-organic materials that may be used in organic production and handling is not a popularity contest of how many comments are received.

Relying on the number of comments received is a poor indicator of actual value or future value of a material.

The decision should be based upon review of the criteria intended to evaluate materials.
Please ask yourself if the material could be of use in the future. It is very difficult to put it back on the list. Adding material to the National List is a very long and arduous process, and removing something is not to be taken lightly.

Please do not limit the toolbox unnecessarily. We need to do everything we can to encourage more organic acreage in the United States and to allow those just starting in organic to have the tools that they need to be successful. Thank you very much.

CHAIR RICHARDSON: Thank you very much, Katherine. Appreciate your comments. And I know that they have been sent in. Written comments have already been sent in.

Are there specific questions for Katherine on any of these topics? It's always nice to have someone out there in the community reminding us that we need to constantly be pushing as an NOSB to have some of those materials that are just sitting there be further addressed by the NOP. So that was helpful.
Okay, I don't see any questions coming in on my computer so thank you, Katherine.

Our next speaker is Eileen Hourihan who couldn't get on earlier. Eileen, are you out there?

MS. HOURIHAN MCCARTHY: Yes, hi. Can you hear me?

CHAIR RICHARDSON: Yes, I can hear you loud and clear.

MS. HOURIHAN MCCARTHY: Okay, great, hi. This is Eileen Hourihan McCarthy. I'm a registered dietitian in Illinois.

And I just have a few comments. And I just wanted to speak against the use of sulfites in food -- actually, in other products too. And the reason why I'm saying that is because some people are allergic to them. And as you all know they respond negatively to them. They can get anaphylaxis which they can die from. They can get hives. There's all kinds of reactions that you can get from sulfites.

And so I would think as human beings and
as a country that we would say gosh, if there's any product chemical out there that harms another person or puts them at risk then certainly we would ban that from the food supply and from the product supply.

I would just think that we would do something like that.

I know this is coming from a human point of view but that's what medicine is, that's what being human is all about. That's who we are.

So anyway, I would just -- if we could get rid of those sulfites it would be wonderful.

And if we can't, I think that we should move the system to more of a regionally grown, our food regionally grown, and then just eat whatever is in season near you.

And I know you say my gosh, we're going backwards and how archaic. But in truth it isn't because as a medical practitioner the fewer chemicals and oftentimes ingredients that I have in my food, the healthier I'm going to be. We really need to go back to something that's as
natural and pure as we can.

And I know, I don't mean any harm. I'm sure a lot of you don't like me saying that, but it really is true.

And the other side of it is that if any of us responded medically to sulfites or any other chemical or product or our families and our children or anyone we would get that off of that GLAS list as quickly as we could.

And I think that's kind of the bottom line here. I mean, we've heard a lot of information from everyone, but my gosh, you know, farmers have families too.

And I do understand capitalism, it's money, we make a living. I understand how difficult it is for the farmer. I really, really do and I really feel for you.

But I think that the really smart farmer says I'm going to the other extreme and I'm going to make a heck of a lot of money doing this.

Set up a system and get rid of all those chemicals that our body just doesn't need or want.
Our little cells don't know what to do with them. But anyway, thank you for your time and forgive me for saying that, but I'm sure a lot of us agree.

CHAIR RICHARDSON: Oh no, it's fine. Your comments are most welcome, Eileen.

And I note that the two materials perhaps that you were most concerned about were lignin sulfonate and sulfuric acid.

Are there any other specific chemicals from your point of view as a dietitian that we are going to be looking at for sunset that specifically come to mind apart from just sulfites in general?

MS. HOURIHAN MCCARTHY: Not at this time and not for this discussion, but I'm going to look further into it and then I can respond back to you appropriately.

CHAIR RICHARDSON: Very good. Well, I don't see any other specific questions for you so I thank you very much for your comments. Much appreciated.

MS. HOURIHAN MCCARTHY: Okay, thanks
so much.

CHAIR RICHARDSON: Now, Jenny, according to my list here that completes the 17 people that were signed up for this webinar. Am I missing anybody?

DR. TUCKER: We did look for Jessica Green to see if we could find that area code to see if she's online. Jessica Green, are you out there? We don't believe that Jessica Green ended up calling in. But we did check her by both name and number.

CHAIR RICHARDSON: All right. Well, thank you.

So this brings us to the end of our first webinar. And as NOSB chair I'd just like to say wahoo, that was pretty darn fabulous.

We still have it says here on my screen 72 audio, 55 web. So we've managed to have a really terrific conversation and hear some very interesting comments under less stressful circumstances than sometimes we have at the in-person meetings where we are more pushed for
time and we have three minutes per person and not always as much time for a conversation afterwards.

So I'm really very pleased with this. And I'm looking forward to the next webinar on October 20.

And I hope that as many of you as possible can tune in because these public comments, as I said at the beginning, are an absolutely critical part of our work on the NOSB to be sure that we've heard from the maximum number of stakeholders that we can do.

And it's especially helpful to us to hear people that we know can't come to the meeting, and perhaps farmers who can't take long enough to get off the tractor to certainly make the travel to a more distant place.

So, thank you everyone. I'll turn it back over to you, Jenny, in case there's any closing comments from the NOP or to Paul. I'm not sure. You guys, NOP.

DR. LEWIS: Let me speak on behalf of my colleagues here at NOP, thanking Board members and
the public for joining us today at our first webinar.

I agree wholeheartedly with Jean in terms of the success we've had here. I'm looking forward to having future webinars. Obviously, we're having one next week.

I want to also thank the NOP staff that really in terms of the background behind the scenes work, Michelle and others, that it's really helpful.

So again Michelle, Jenny and others, thank you for all your work. And I'm looking forward to joining everyone in about a week. Thank you.

CHAIR RICHARDSON: Thank you. I'll talk to many of you next Tuesday. Same time, same station. Goodbye.

(Whereupon, the above-entitled matter went off the record at 3:07 p.m.)
UNITED STATES DEPARTMENT OF AGRICULTURE

NATIONAL ORGANIC STANDARDS BOARD

COMMENT TELECONFERENCE

TUESDAY
OCTOBER 20, 2015

The Board met telephonically at 1:00 p.m., Jean Richardson, PhD, Chair, presiding.

PRESENT

JEAN RICHARDSON, PhD, Consultant and organic maple syrup producer, NOSB Chair
TRACY FAVRE, Consultant, NOSB Vice Chair
HAROLD AUSTIN, Zirkle Fruit Company, NOSB Secretary
CARMELA BECK, Driscoll Strawberry Associates, Inc.
COLEHOUR J. BONDERA, Kanalani Ohana Farm
TOM CHAPMAN, Clif Bar & Company
LISA de LIMA, MOM's Organic Market
ZEA SONNABEND, California Certified Organic Farmers (CCOF)
ASHLEY SWAFFAR, VitalFarms

FRANCIS THICKE, PhD, Radiance Dairy

C. REUBEN WALKER, PhD, Southern University and A&M College
STAFF PRESENT

MICHELLE ARSENAULT
LISA BRINES
EMILY BROWN ROSEN
PAUL LEWIS, NOSB Standards Division Director
MILES MCEVOY
DEVON PATTILLO
BETSY RAKOLA, USDA, Organic Policy Advisor
EDDIE STOKER
JENNY TUCKER, Technology Facilitator,
    National Organic Program
JESSICA WALDEN
SONYA WILSON

COMMENTERS PRESENT

AISHWARYA BALASUBRAMANIAN, AgroFresh, Inc.
BOB BLUE, Fetzer Vineyards
BARRY FLAMM, Citizen
DIANE KULL, Applegate LLC
GOLDIE CAUGHLAN, Citizen
JACKIE DeMINTER, MOSA
JEFF NOLAND, EnergyWorks
JANE PARKER, Gourmet Garden
JESSICA SHADE, The Organic Center
KEVIN ENGELBERT, Citizen
KENT HENDERSON, Citizen
MARGARET SCOLES, IOIA
PAUL BROWNER, DSM
ROBERT LAROSE
STEVE ETKA, National Organic Coalition
THEOJARY CRISANTES, Organic Farmer
VAL GEORGE, CCOF
VICTORIA ALVAREZ SAAVEDRA, Flavor Industry
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(1:00 p.m.)

DR. TUCKER: Okay everybody, this is Jenny Tucker with the National Organic Program. I am your technology facilitator today. And so if you are on the phone, and would also like to follow with us online, you can go to ReadyTalk.com and enter in the participant code on the left, 7202 thousand. That will get you into the online version.

We’ve requested that everyone stay on mute throughout the call so we can minimize the risk of background noise and interference. When it is your turn for folks that signed up in advance to give public comment, we will call you and then you can unmute yourself. But in the meantime, we’d like everybody else to just mute themselves throughout the call.

So again, thank you very much for joining us. If you run into problems you can chat with us down in the left side of your screen, so you can send us a message. So if
you're having technical difficulties, the
ReadyTalk technical support is quite good. Go to
ReadyTalk.com and they will help you out.

Okay. I'm going to go ahead and hand it
over to Paul. Dr. Paul Lewis is our new
Standards Division Director, and so I'm going to
turn it over to him for his welcome to the group.

DR. LEWIS: Thank you, Jenny. Good
afternoon, and welcome everyone to today's
teleconference. I'd like to welcome NB Members
and the public. Appreciate NOSB Members'
involvement in this call and all your efforts and
work serving on the Board.

I'm excited about the opportunity for
the Board to conduct a meeting via teleconference
that provides an important opportunity for
greater public access to NOSB meetings. In this
meeting, like other meetings of the NOSB, we
operate under the Federal Advisory Committee Act.
I'm looking forward to hearing comments from the
public to assist the NOSB in preparing the
recommendations to USDA.
I want to take a moment to thank my NOP and Standards Division colleagues with the help behind the scenes today to bring us to today's teleconference on --

(Telephonic interference.)

DR. LEWIS: -- to a productive meeting, and continuing our NOSB meetings to next week. Before I turn the meeting over to our Chair, I'd like to welcome Betsy Rakola, USDA Organic Policy Advisor, and invite her also to make a few remarks.

MS. RAKOLA: Thank you Paul. Hello everyone, thank you for joining us. Again, my name is Betsy Rakola. I am the USDA Organic Policy Adviser. I sit in the office of the Under Secretary for Marketing and Regulatory Programs and I'd like to read a brief statement from the USDA.

USDA takes any complaints regarding our operations seriously, and that is why AMS looks into any formal complaints issued by outside groups. This was the case when the Cornucopia
Institute filed a complaint earlier this year. AMS launched a thorough review and ultimately found and determined that the operations were in compliance and that there was not sufficient evidence to conduct additional investigations. Furthermore, there is no investigation of the National Organic Program or its staff happening by USDA's Inspector General. That is inaccurate.

The focus on any one public servant in an attempt to damage his credibility is inappropriate and without merit. USDA values and has faith in Deputy Administrator Miles McEvoy's leadership of the National Organic Program.

USDA's National Organic Program is the bedrock regulatory program responsible for developing national standards for organically produced agricultural products. These standards assure consumers that products with the USDA organic seal meet consistent, uniform standards. The USDA organic seal, and the NOP program itself, have helped organic producers and
businesses achieve unprecedented levels of growth for organically produced products. The retail market for organic products is now valued at more than $39 billion, while USDA organic operations have grown more than 250 percent since 2002. USDA's National Organic Program is a leading global standard and a major factor in this success.

DR. LEWIS: Thank you, Betsy. Again, this is Paul Lewis, and I'd like to turn the meeting now over to our Chair. Jean?

Jean, are you there? I'm just getting our Chair on board.

DR. TUCKER: Jean, are you with us?

CHAIR RICHARDSON: What, can you hear me?

DR. TUCKER: Yes, now we can hear you. It was showing as mute, so you're unmuted now.

CHAIR RICHARDSON: Okay, yes I had myself on mute. I was being obedient which is a change, but there you go.

Today, in the state of Vermont it's a
gorgeous 60 degrees. The sun is shining and the
mountains are snow-topped against the blue sky.
And it's lots of lovely leaves are still in their
fall colors. So hopefully it will be a bit like
this when some of you come to Vermont next week.

I'd like to welcome you all to this
second session. I'm looking forward very much to
hearing from all of you. I'd like to start first
by asking Michelle if you could read out the NOSB
Members that are on the call today?

MS. ARSENAULT: Hello everyone, this is
Michelle. I have with us on the line, Ashley
Swaffar, Calvin Walker -- is somebody -- if
you're not talking please make sure you're on
mute. We're getting a little feedback here in
the office. Thanks.

So Calvin Walker, Carmela Beck, Colehour
Bondera, Francis Thicke, Harold Austin, Jean
Richardson, Lisa de Lima, Tracy Favre, and Zea
Sonnabend. Did we miss anyone?

CHAIR RICHARDSON: Sounds right.

MS. ARSENAULT: And Jean Richardson, I
said Jean, right?

CHAIR RICHARDSON: Yes, you did. Yes, okay that sounds good. Well I'm -- when I look at the computer here, I see that there's 40 people present out in the broader public and 68 on audio. So that's really a great bunch of people on the call.

I'd like to call on the first speaker of this afternoon, and that is Jessica Shade. And when each of you come on to give your five minute presentation, could you please -- talk loudly, and say where you're from, so that the record clearly reflects who's talking? Thank you very much. Jessica, over to you.

MS. SHADE: Hi, can you hear me?

CHAIR RICHARDSON: Yes, we can.

MS. SHADE: Great. So first I just want to thank you so much for the opportunity to provide these comments. My name is Jessica Shade and I'm the Director of Science Programs for the Organic Center. We are a non-profit organization that covers up-to-date studies on sustainable
agriculture and health. And we also collaborate
with academic and governmental institutions to
fill gaps in our knowledge.

So first of all I want to say thank you
to the Materials Subcommittee for its
recommendation on research priorities. We really
appreciate both the creation of the research
priorities framework and the efforts made by each
subcommittee to bring forth its research
priorities.

We were especially happy to see the
inclusion of research priorities related to
livestock management. And the development of
alternatives for materials on the national list.
We really rely on the annual NOSB research
priorities to guide the development of our own
research projects.

And livestock management issues, and
materials or alternatives, are some of the topics
that we've also heard raised by stakeholders. To
that end, I also just want to say that we're
really excited about the Organic Trade
Association's National --

(Telephonic interference.)

MS. SHADE: -- working group, and we plan to support it and help it move forward. The Organic Center is really eager to advise it on scientific methods, identifying and coordinating with researchers, and grant management, as appropriate.

So I'm just going to quickly highlight a couple of our current projects that were informed by NOSB priorities. And then go into a few suggestions for additions to this year's list.

So a few years ago the NOSB put out a research priority to find alternatives to antibiotics for Fire Blight, and the Organic Center responded to that by collaborating with researchers from the University of Washington to provide critically needed information on how to prevent Fire Blight from decimating apple and pear orchards without the use of antibiotics.

And our report that's out now covers
issues such as sanitation, vigor control, sequence and timing of control materials, space coverage, and varietal susceptibility, and it's published online, it's available to the public. We've also been passing out hard copies and traveling with researchers to provide presentations about our findings.

We also have a project examining organic solutions to control citrus greening disease, which is a response to the 2014 NOSB priority for plant disease management. And our project looks at the efficacy of organic pesticides for controlling the Asian citrus psyllid, tests combinations of antimicrobial treatments, and also tests non-GMO varieties of citrus for their use in organic systems.

And we just finished the first phase of the project which identified effective organic compliant insecticides to fight the Asian citrus psyllid. And now we're analyzing preliminary data on the effectiveness of organic approved antimicrobials.
We're also addressing the NOSB 2014 priority area, soil building practices through our collaboration with the National Soil Project at Northeastern University, where we're looking at specific soil matter components -- soil organic matter components, to measure soil carbon sequestration and soil health, while developing a reference data base that will allow agronomists, farmers and environmental scientists to correlate soil health and productivity with agricultural practices.

We have several other projects going on, but to keep this short I'm going to move on to our suggestions for additions to this year's NOSB research priorities.

So first I want to highlight the need for more research on manure safety. As you know, last fall the FDA proposed revisions to FSMA that included changes for the required interval that untreated manure could be applied, and they suggested a nine month minimum interval requirement, which directly contradicts the
National Organic Program regulations for applied application of raw manure.

And that ruling was not adopted, because the FDA decided that further research was needed. And we believe that it's really important for organics to be involved in that research process. So the Organic Center is working with a team of researchers to assess current practices used by the organic industry related to manure and rotational grazing, to conduct a needs assessment, to gather information about the use of animal-based soil amendments in organic agriculture, and evaluate and characterize the current practices and needs of organic producers, and the result of that project -- just a minute --

(Telephonic interference.)

DR. TUCKER: All right, Jessica, I forgot to announce that when we started.

CHAIR RICHARDSON: All right, so can you just sort of wrap up, Jessica?

MS. SHADE: Wrap up, absolutely. So we
just want to make sure it gets on the radar of OREI priorities, so more research on manure safety.

I also want to suggest including pollinator health as a research priority. We completed a review of scientific literature about pollinator health and we really need more research to confirm the specific best practices used by organic that have beneficial effects on pollinators, And methods for implementing them on farms. So thank you so much.

CHAIR RICHARDSON: Great. Thank you, Jessica for your comments. Are there questions? I don't see any question marks coming up on my screen. Are there questions for Jessica? I know you also have written remarks as well, which we will be looking at from your organization.

So the next speaker will be Paul Browner, and he will be followed by Robert Larose.

Paul, are you there?

MR. BROWNER: Yes, I'm here. Can you
hear me?

CHAIR RICHARDSON: Yes, thank you.

MR. BROWNER: Great. Okay, so in an effort to keep things rolling, my name is Paul Browner. I'm the global head of Regulatory Affairs and Quality Management for DSM Nutritional Products. We're a company that makes a wide variety of nutritional products including Omega-3.

I have comments that I want to make on -- primarily on fish oil, and touch on, if time permits, on some other substances on 605(a) and (b). So for fish oil, I want to hit on three main topics, sustainability, contaminants, and plant-derived alternatives.

First of all, sustainability. It's important to note that first and foremost, fish are not fished for their fish oil. Fish is what some people call a byproduct of the fish agriculture industry. And it's turned into a value-added product for consumers.

Although fishing remains a global
concern, the fish that traditionally are used in
fish oils are not those that are over-exploited.
Things like sea bass, and shark, and some species
of tuna. Fisheries such as the Peruvian fishery,
the Anchoveta Fishery are one of the most highly
regulated fisheries in the world.

What is often misinterpreted as a poor
fishing season is the location of an anchovy
biomass. During some years when the Kelvin waves
are high, the biomass moves further offshore, and
what the inshore fishery's permitted. So it's
not to say the levels are low, but that the
biomass is further offshore.

The Subcommittee used the FAO report,
The State of World Fisheries and Agriculture.
While FAO is a very respected agency of course,
I believe it over-generalizes the state of the
fisheries. Global fishing zones are huge and
it's my view that the FAO report is not the only
reference that needs to be reviewed. Non-
government organizations such as sustainable
fisheries partnerships are important, as the FAO
The SFP surveyed individual fisheries and fish stocks within a wide area. Each region is separately evaluated for sustainability. Rather than the broad generalizations, situations go down to individual fish stocks, individual countries, and individual fisheries.

If the NOSB wants to delve into this complicated question, it should give itself adequate time instead of potentially rushing to judgment based on the over-generalization of the FAO report. Sensational unsubstantiated claims that the fish oil industry will be responsible for the global collapse of the world's fisheries is a truly uninformed opinion.

Contaminants in fish oil. Fish oil used for human consumption is a highly refined oil that undergoes classic refining steps to eliminate or significantly reduce the amount of environmental contaminants found in fish oil. The FDA itself will recommend we eat two to three serving of fatty fish weekly. Health benefits
far outweigh concerns of contaminants.

You know, for foods, for organic foods
some people fry with concentrated fish oils.
Concentrating the oils also concentrates contaminants. As an actual fact, I know one company, American organic fish oils in the U.S., that uses actual concentrated oil. Often times it's just highly refined oil that is not concentrated.

Mercury for example, is a contaminant often associated with fish oil. The technical report of the -- on the laboratory analysis of 31 fish oil supplements, and they quote, every product contains a measurable amount of mercury.

What are these measurable amounts? Average concentration of 2.9 parts per billion, of 6 parts per billion? Even the Center for Food Safety admits that, in their comments, that these are well below the established FDA tolerance level.

You can talk about fish oil with mercury contamination, but the fish that are primarily
sourced for oils are small pelagic fish, you
know, anchovies and sardines. They don't bio-
accumulate high levels of mercury. Levels are
further reduced through refining.

And to wrap up, we talked about plant-
derived alternatives, plant-derived alternatives
of Omega-3, ALA is a fatty acid. While this is
a recognized polyunsaturated fatty acid, the
health benefits of ALA, only a fraction of the
fatty acids are converted to EPA DHA in order to
be metabolized by the human body.

The conversion of ALA is very, very
inefficient, approximately about ten percent.
Health conscious organic consumers receive only
a fraction of Omega-3 benefits from ALA. Plant-
based source of Omega-3 would not be an efficient
alternative to fish-based Omega-3.

CHAIR RICHARDSON: That's the five
minute bell. Is that okay, Paul?

MR. BROWNER: Yes, just as a final
comment, if I could get just two more sentences
here?
CHAIR RICHARDSON: Sure, go ahead.

MR. BROWNER: DSM strongly recommends relisting of fish oil to the organic list upon changing notation, and we encourage NOSB not to move fish oil based on uninformed opinions and loosely presented facts.

Please be informed that the true nature of healthy fish oil does not have the dire consequences on sustainability others will have you believe.

CHAIR RICHARDSON: Great, thank you very much, Paul. I don't see any specific questions coming in on my computer, and I said you would comment --

DR. TUCKER: Tom Chapman, sorry. Tom Chapman has a question.

CHAIR RICHARDSON: Sorry?

DR. TUCKER: Tom Chapman has a question.

CHAIR RICHARDSON: Okay, Tom.

MR. CHAPMAN: Hi, Paul.

MR. BROWNER: Tom.

MR. CHAPMAN: I have three questions for
you. In your written notes, you state that the
primary source of your fish oil is from Peruvian
fisheries. What do you mean by primary? Can you
quantify that for me?

MR. BROWNER: Well, for many, many
years, Tom, the Peruvian Fishery has been the
primary source for not only our fish oil, but
many, many fish oils that are marketed in the
U.S.

It's not the only fishery. And many
organic fish oil -- or sorry, fish oil
manufacturers we start to see coming on line and,
you know, supplying all the fish oil from the
anchoveta industry, is not possible, basically.
They have quotas, you know, they have quotas that
are very highly regulated. So what it means is
that some fish oil suppliers may have to qualify
other fisheries, other regions of ocean waters.

MR. CHAPMAN: Okay.

CHAIR RICHARDSON: Okay?

MR. BROWNER: Great.

MR. CHAPMAN: And one other question, if
I can?

CHAIR RICHARDSON: Yes.

MR. CHAPMAN: You know the FAO code of conduct for sustainable fishing and responsible fishing, is that a requirement that DSM places on its suppliers?

MR. BROWNER: It's one that we -- well, we qualify fisheries. We always ask that question, if they abide by the FAO requirements for sustainable fishing. And it's -- sustainability is a pillar of the DSM business.

CHAIR RICHARDSON: Thank you, Paul. I know that there are extensive comments from the fish oil industry for us to read and they contain all this in more detail, and that's been much appreciated by those of us that are reading it.

The next presenter is Robert Larose and he will be followed by Kent Henderson.

Robert, are you there? Robert Larose of BioSafe Systems, if you're talking, we can't hear you.

DR. TUCKER: We've been trying to find
Robert on the list, but he's not showing up.

Robert?

CHAIR RICHARDSON: Robert Larose does not appear to be there. Robert, if you are online, we can't hear you. So let us know, and we could fit you in later on if that is the case.

So therefore our next speaker is Kent Henderson, a veterinarian. Kent, you're up now.

MR. HENDERSON: Hello, can you hear me now?

CHAIR RICHARDSON: Yes.

MR. HENDERSON: Very good. I'm doing a PowerPoint so I will just ask to have the slides advanced as I go from slide to slide.

Thank you very much for inviting me this afternoon. This is my second presentation. I also did this four years ago. I'm a veterinarian in a seven person practice in Northwest Vermont. I've been servicing dairy herds and their parasite problems for the last 40 years.

I'm here today to ask the Board to reduce the current restrictive meat and milk
withholding times assigned for Fenbendazole, in order to allow modern organic and dairy beef farmers to better manage the health of their herds, and also consider removing Ivermectin dewormers with the approved product list, because of their detrimental effect on dung beetles and growing antiparasitic resistance development to Ivermectin type deworming products. Next slide.

From the written comments in 2001, a zero day milk withholding time was established for Fenbendazole by the FDA. Peak Fenbendazole level in milk is only 18 hundredths of a part per million, occurring 24 hours after ingestion of the product and FDA approved safe concentration is determination to be 1.67 parts per million. So Fenbendazole's actual peak concentration in milk is nearly ten times less than the safe FDA concentration. Next slide.

This graph is from the 2001 FDA approval submission and shows that blood concentration is clear, totally cleared in eight days, and is below the safe level at three days. If a 14 day
meat withhold for organic beef was adopted, it would allow for another six day buffer for any medication delivery variation. Next slide please.

Current organic standards only allow for emergency treatment for severely infested sick cows. These current standards place the modern organic dairy in jeopardy of bankruptcy by forcing the farm to accept current -- to accept negative non-organic prices for three months while the milk clears after treatment with FBZ for lungworm.

In this case, after finding 35 of their 65 cows coughing and showing signs of lungworm infestation, this herd was fed aloe vera pellets, diatomaceous earth, kelp, and Agrimoss as directed by the certifier, but no improvement occurred.

Cornell Lab diagnosis came back as lungworm. So this organic producer resorted to feeding Safe-Guard pellets to his dying -- in two days the cows began to recover and normal
production resumed.

This 65 cow Jersey dairy will lose over $55,000 in milk sales due to the extensive 90 day milk withhold period. The producer commented that if lungworm infests his cows again, he will be forced to drop out of organic production, so he hopes that NOSB will reduce the unnecessary milk withholding time. Next slide please.

These are the current classic deworming strategies that have been proven to work well in our non-organic herds. By placing restrictive milk and meat withholding times on FBZ, organic dairy producers are unable to deworm an entire herd in the fall, or individual cows or heifers at freshening when an immune system must be working at peak performance. Next slide.

If parasite eggs are removed from the whole herd in the early grazing season, load stays low for the entire grazing season. Therefore, the whole herd needs to be dewormed. And it is not economically feasible to operate a non-organic milk process while waiting out the
excessive 90 day milk withholding time. Next slide.

Proactive strengthening of immune systems is a goal of organic producers because they have chosen to care for their animals without antibiotics and other antibacterial drugs.

Proper vital security management goes beyond just injecting cows with vaccine. It requires adequate nutrients and trace minerals in the diet, and removal of internal and external parasites to promote a strong immune system. Next slide.

Internal parasites promote the TH2 pathway which competes with the proper immune response to vaccines and leaves the calves susceptible to secondary invaders like coccidiosis and bovine respiratory disease. Next slide.

355 stocker calves were placed in a split trial design on pasture. Half were treated with Fenbendazole and the other were untreated,
controlled. Then the calves were moved onto the feedlot, and half the controlled were left untreated, and the other half were treated with FBZ. The same with the treated pasture calves. Of the four groups in the feedyard, 60 percent of the polled, that is the ones treated for pneumonia, came from the group that received no Fenbendazole on pasture or in the feedlot. And there were only seven percent of the polls came from the calves that were treated in pasture and in the feedyard. The only difference was the deworming, and it shows a negative effect of internal parasites on natural immunity. Next slide.

FBZ is the superior --

(Telephonic interference.)

MR. HENDERSON: Could I go to my 13th slide please for my closing remarks?

CHAIR RICHARDSON: Yes, okay.

DR. TUCKER: Is it that?

MR. HENDERSON: Okay, and this is the closest example that I could come to, to find an
organic identified field trial where --

CHAIR RICHARDSON: Slide No. 13, Jenny.

DR. TUCKER: Yes, except I have the
inserted first slide, so his 13th slide is our
14th slide here.

CHAIR RICHARDSON: Okay. Go ahead.

MR. HENDERSON: Okay, so what I'm seeing
on my screen is the photo of the pasture from the
buffalo herd?

DR. TUCKER: Is that what you want to be
showing, or?

MR. HENDERSON: Yes, that's what I want
to show. And so what this is showing is it's the
closest example I could come up to to an organic
identified field trial. And if you'll notice the
intact fecal pats across the pasture, this is
where Bison received eprinex pour-on. Eprinex
was extruded six days and killed off all the lung
beetles that would have ingested these manure
pats.

So to assist organic cattle producers,
build soil health and subsequent water quality,
Ivermectin dewormers should be removed from the NOSB approved product list. For further evidence of the lethality to dung beetles, please look at sections in the written comments.

CHAIR RICHARDSON: Thank you very much, Kent. And I know that the Board Members will be getting copies of these slides so that we can look at rest of them -- I believe there were 29, so that we can review these prior to the meeting, and certainly prior to the discussion document that we'll be looking at later in the week, and then in April.

I am not seeing any questions coming up.

DR. TUCKER: Francis has a question.

CHAIR RICHARDSON: Francis?

MR. THICKE: Yes, can you hear me?

MR. HENDERSON: I got you, I can hear you.

MR. THICKE: Okay, I got three quick questions. One, how long do you think the withholding time should be for Fenbendazole?

MR. HENDERSON: In milk it should be
zero. It is always below the safe level in milk. I think it should go out to 14 days for beef. As I said, baby calves are -- in cows that have been dewormed, we've got data and it's in your written comments, that those calves, it doesn't show up in the tissue of bob veal, from newborn calves from cows that have been dewormed.

MR. THICKE: Okay, Number 2, what about moxidectin, what's your opinion on that? If it should stay or be taken off the list?

MR. HENDERSON: Moxidectin, I don't use the product, I'm not real familiar. If it is an Ivermectin-type product, I would not recommend that it be used on organic cattle or any pasture cattle.

MR. THICKE: Okay, and the third question, currently we have a requirement that if you use Fenbendazole, it requires a veterinarian's prescription, and that's not the case for Ivermectin currently. Do you think that it should remain that a veterinarian has to prescribe Fenbendazole to use it for an organic
farmer?

MR. HENDERSON: It is not done so for non-organic farms. I do not see why it would have to be a veterinarian prescription item. I know that it is sold over the counter, the blocks are sold over the counter, and so it is not a prescription item.

MR. THICKE: Okay, thank you.

CHAIR RICHARDSON: Thank you very much, Kent, appreciate your comments.

The next speaker is Steve Etka, and he'll be followed by Jeff Noland. Steve, are you there?

MR. ETKA: I am, can you hear me?

CHAIR RICHARDSON: Yes.

MR. ETKA: Great.

DR. TUCKER: I'm going to ask, Steve, before you start, everybody please, please go on mute. We are still getting some background noise. I can't always tell who it is, so please stop monitor and go on mute. Thanks so much. Steve?
MR. ETKA: Okay, thanks. My name is Steve Etka and I'm Policy Director for the National Organic Coalition. I'd like to talk a little bit about some of the things that NOC is working on in Washington D.C. and how those things relate to your work on the NOSB.

First we continue to be very pleased that the NOSB is putting forth the list of research priorities, and in addition to that excellent list and discussion of research priorities adopted by the Materials Subcommittee, NOC is urging the addition of two topics to the list.

First, methyl bromide alternatives for organic strawberry production. Currently no commercial scale organic strawberry nurseries exist to supply organic strawberry transplants to growers.

As a result organic strawberry growers have no other choice than to purchase transplants from conventional nurseries, which fumigate their soils with the argon depleting chemical methyl
bromide.

Now that methyl bromide has been outlawed for use under the UN's Montreal protocol since 2005, the U.S. has applied for an exemption for the strawberry industry for the past ten years. And NOC believes that the U.S. should prioritize research on organic alternatives to the use of methyl bromide in strawberry production.

The second is celery powder. Non-organic celery powder contains higher levels of nitrates, thereby performing an important antimicrobial function that organic celery cannot provide in organic processed meat products.

This raises a couple of questions. First, why does non-organic celery powder contain higher levels of nitrates? And is this desirable from a health standpoint?

Second is, is it possible to modify the growing conditions to grow celery organically to obtain the same antimicrobial function?

We're also very pleased that the
subcommittee has included a section calling for more research on sanitizers and alternatives to the use of chlorine.

I also wanted to note, to let you know that in the congressional annual preparations process, the Senate Appropriations Committee included language noting the NOSB's work in this regard. And urging USDA to consider these priorities in crafting requests for research proposals under two key USDA competitive grant research programs.

The second issue I wanted to bring to your attention is regarding the use of ionizing radiation. Currently the organic rule prohibits the use of ionizing radiation in organic, but points to an FDA description of ionizing radiation to guide handlers in knowing which specific technologies are prohibited.

But on closer inspection, it appears that the FDA description is too narrow. For instance, our research has shown that a subset of ultraviolet radiation, specifically UVB and C, is
actually considered to be an ionizing, and yet
such UV technologies are not captured in the FDA
description of ionizing radiation.

As a result, we feel that there may
actually be some forms of ionizing radiation
technology that should be prohibited in organic
that are not, because of the inadequate FDA
description. NOC has written a memo to the NOP
raising this concern and we've recommended that
the NOSB take this issue up for further analysis
and public debate.

The last issue I'd like to raise is the
issue of animal welfare standards, and
particularly outdoor access for poultry. At the
last NOSB meeting, Miles McEvoy mentioned animal
welfare standards as being on the short list for
new NOP rules. Animal welfare standards are one
area where organic is most in need of
improvement, particularly in the area of outdoor
access for poultry.

NOC members are very eager to see
progress in the area. Unfortunately, we've heard
some suggestions in Washington that the recent avian influenza challenge that's faced in the poultry sector could interfere with NOP plans to strengthen rules with regard to outdoor access for organic poultry.

NOC members argue that there is no reason to delay the immediate improvements based on the recent AI problems, in fact existing NOP rules already allow for temporary confinement of birds in emergency circumstances.

But in the long run, we would argue that allowing poultry to have access to open air and sunlight should be viewed as part of the solution to pathogen problems, and not the problem itself.

NOC has submitted a short paper to the NOP laying out some of the most recent science about the relationship between avian influenza and confinement versus outdoor access. And we'd be happy to share that paper with NOSB members too if that would be helpful. Thanks for the opportunity to testify.

CHAIR RICHARDSON: Thank you very much,
Steve. Questions are not coming to Jean Richardson, maybe they're going to Chairperson, but I'm not seeing any.

DR. TUCKER: I don't see any questions on the screen. They have been coming for co-presenters, so if you can't see that I'm not sure what the problem is.

CHAIR RICHARDSON: Okay. So thank you very much, Steve. Much appreciated and I know we've read the -- I mean, you've sent to NOC and sent in extensive other comments which I know we've all read.

The next speaker is Jeff Noland, and he'll be followed by Theojary Crisantes. Jeff are you there?

MR. NOLAND: Hi there, yes I am here.

Can you hear me?

CHAIR RICHARDSON: Yes.

MR. NOLAND: Okay, perfect. Now thank you all so much for allowing me to participate. I'm the Managing Director of a firm by the name of EnergyWorks BioPower in Annapolis, Maryland.
And my comments today are regarding the commencement of the proposed sunset of the prohibition against using ash from manure burning as an organic fertilizer ingredient.

So that the first point I would like to make is within the National Organic Program there's a compulsion for the NOSB to consider the environmental value of a particular course of action. And I will say as second that in our region -- and also I think the initial comments that were made today, reflect the fact that at least around here manure is the single largest contributor to water pollution. Certainly in the Chesapeake Bay watershed, and in general in the mid-Atlantic region.

And quite frankly, that something has to be done about it. It's a major issue and it's certainly the major issue in the Chesapeake Bay.

One of the points that I would make is that I know that it'd be great if we could dry all the manure and put it in a form where it could be easily transported. But it's just not practical
to do that. And it creates the potential for significant air emissions.

And from the people that have tried it, a really big outfit in that category, Perdue Farms, are not succeeding with it financially. One of the solutions that has evolved is to take manure and use it to generate renewable power. This kind of an approach consumes very large quantities of manure. And it can be a major element in solving the excess manure challenge.

However, the economics of projects such as that can be a struggle without a significant amount of government intervention. An economic model that maximizes the value of reclaimed manure minerals is therefore crucial to the viability of projects like that.

In being able to commit use to manure minerals in an organic fertilization program more than doubles the revenue that a renewed energy facility can derive from these residues.

Another point is that reclaimed minerals can replace calcium phosphates in an organic
fertilization program. While manure minerals are excluded from use, synthetic products that are mined are not. And so it's very common to mine phosphates to rely with, and declare excavation a radioactive tailings.

And these tailings piles, or stacks as they are called, are regulated by the U.S. EPA and they are a major environmental hazard today in phosphate mining regions such as Central Florida. So a synthetic product that generates significant quantities of regulated radioactive waste is allowed within the organic list. But non-synthetic manure minerals are prohibited.

I'm sorry to say that most organic consumers, myself included, would find this to be completely inconsistent with logic, and with the organic mission.

So in light of this an open-ended prohibition on using manure ash as it's called, in organic fertilization programs really needs to be allowed to sunset. And it needs to be replaced with something that reflects the current
reality. That way all -- manure is a major weather pollutant. There are pollution control solutions and for a chemical reaction to select nutrients and operate under EPA regulated air permits.

Then I wanted to talk to you about uncontrolled open burning, but a controlled environment reaction with the mission controls. Evidence that the prohibition has outlived its original function is evidenced by a lack of consensus on what it is supposed to be prohibiting or promoting.

So for example, this technical panel reviewed our material and purport to have been in on its original conception. They say that it's in place to prevent the loss of organic nitrogen sources, but when the subcommittee voted unanimously against sunsetting this, the current organics, you know they said it had something to do with carbon and the use of carbon in this.

So ash, and also ash from animal sources which contain carbon are allowed but ash in the
air is not. So it's inconsistent and by solving
the nitrogen imbalance problem, and putting
carbon to use in generating renewable power,
neither of those arguments hold water.

So I will say kindly, that this position
isn't just ours -- I mean our firm operates a
manure to energy system, but supported by the
Departments of Agriculture and the Environment,
and all Chesapeake Bay watershed states by the
U.S. EPA region affiliated with Chesapeake Bay
Program Office, by the Chesapeake Bay Commission,
and furthermore by the immediate environmental
organization in the Bay, the Chesapeake Bay
Foundation. So my point is, it's time to make a
change. We need to replace a prohibition that
promotes water pollution with a modern approach
reflective of today's reality.

CHAIR RICHARDSON: Great, thank you very
much.

MR. NOLAND: Those are my comments.

CHAIR RICHARDSON: Jeff, thank you.

MR. NOLAND: You bet.
CHAIR RICHARDSON: Questions for Jeff?

Are there questions for Jeff? Sorry, I can't hear you.

DR. TUCKER: We see no questions for Jeff on the screen.

CHAIR RICHARDSON: Okay, me neither.

Okay, thank you very much, Jeff.

MR. NOLAND: Thank you, any time.

CHAIR RICHARDSON: The next speaker is Theojary Crisantes, and he'll be followed by Bob Blue.

Theojary, are you there?

MR. CRISANTES: Yes, I'm here. Can you hear me?

CHAIR RICHARDSON: Yes.

MR. CRISANTES: All right. I have a presentation that has slides. Are they showing up on the screen?

CHAIR RICHARDSON: I don't see anything on the screen, and could you also tell us who you -- you're an organic farmer. Could you tell us something about yourself?
MR. CRISANTES: Sure, my name is Theojary Crisantes, I'm an organic farmer. I work in Wholesum Harvest, I'm the Vice President of Organic Production. We're based out of Nogales, Arizona.

CHAIR RICHARDSON: Thank you. And I don't see anything on the screen, was this some material that you sent in ahead of time?

MR. CRISANTES: Yes, I did.

MS. ARSENAULT: This is Michelle, and sorry I don't recall getting your PowerPoint presentation. I'll look for it, but will you be able to continue without it?

MR. CRISANTES: Yes, I can continue without it, it's no problem.

DR. TUCKER: Before you start talking, I'm going to ask once more to go on mute when you're not speaking. If you're not speaking go on mute.

Okay, go ahead.

MR. CRISANTES: Okay. Good afternoon, thank you for your time. My name is like I said
Theojary Crisantes. I'm an organic farmer of tomatoes, cucumbers, squash, pepper, and eggplant from our family farms in the United States and Mexico.

My grandfather planted his first crop in Mexico over 85 years ago. Then my father read Rachel Carson's Silent Springs several decades ago and switched organic operations to organic production. The book highlighted for our family and for many of our customers the important ecological interconnections between nature and human society.

The feedback we get from consumers of our products is that the most important reason for buying organic produce is that it's practically free from chemicals not found in nature. They feel organic offers a better solution to their concerns for their own health, the health of the workers in the fields, and the reduced impact on the complex web of life found in their natural environment.

In our company, we are passionate
to make organic vegetables available to everyone. Not just for those with high incomes. We want all Americans to enjoy the benefits afforded by having access to organically grown vegetables. These efforts have lead us to choose several technology packages that help us minimize the impact on the natural environment.

Many of our farms are located in established agricultural valleys where the balance of nature has been disrupted over 100 years of productions. We found that often times, the best way to create a sustainable and thriving organic system is to exclude from our production sites, pests and diseases that cannot be effectively controlled by our existing organic methods.

For example, for squash we have minimized the use of a lot of chemicals by incorporating floating row covers to help exclude aphids while still being planted in the outer crust of the earth.

For peppers, deleting the presence of
the pepper weevil in our main production sites -- our production areas that lack the beneficial predator insects, we found that we can minimize the impact on the environment by growing in shade houses, which are mesh covered steel structures covering the soil. The shade house allows us to exclude the damaging pests and virtually eliminate the need for chemical sprays.

For tomatoes the disease, pest, and environmental pressure are extremely high in the open field production areas. We experimented and discovered that we could -- that we end up using heavy loads of chemicals and other scarce resources while we are still rarely producing a commercial, viable, organic crop.

We have invested in glass houses where we grow our tomatoes in containers. The greenhouse system allows us to have a primary disease and pest control system to the exclusion of damaging organisms such as fusarium, verticillium, and nematodes.

At the same times the organic -- the
greenhouse increases the efficiency of our
beneficial insect program. Growing our plants in
containers system allows us to reduce the water
use by 80 percent and to reduce the need of
production areas by 90 percent, helping us to
preserve critical natural habitat and resources.

We are strong believers in the food --
in the solid food way and apply its principle to
all of our operations, even in the containers in
the greenhouse. We create living environments
with significant, diverse, biologicals natured by
our own compost heap to help us grow healthier
and more productive plants.

We believe that our greenhouse
operations meet the standards of biology,
diversity, and natural growing media in the 2010
NOSB recommendations. As an added benefit we use
the combination of production technologies that
allow our company to move virtually all of our
employees to full-time, year-round work, helping
to eliminate the need to migrate from region to
region throughout the year to feed and care for
their families.

Nevertheless, we understand that what is the most environment sustainable solution for our operations will not necessarily be the best for other crops and other production regions.

As the community moves forwards to debate whether hydroponics and aquaponics have a place in the organic industry, we should be careful not to stunt the evolution of methods and systems that help make organics more accessible for our customers.

We must find that a careful balance to avoid -- we must find a careful balance to avoid either excluding approaches that might be truly more environmentally sustainable, or creating a set of exceptions that is neither consistent nor logical.

We are ready to share our experience and knowledge and the task force, and look forward to helping the Board, and the industry, move forward on the issue of hydroponic roles in organics.

Thank you for your time.
CHAIR RICHARDSON: Thank you, that was a great presentation. Much appreciated. And I know that the PowerPoint should be able to be made available to all of us. Is that correct then, Michelle?

MS. ARSENAULT: Yes, I just searched my email and I don't see it. So if you could forward it to me, I will make sure the Board gets it. Sorry about that, thank you.

CHAIR RICHARDSON: So Theo, do you know the right email address to send it to?

MR. CRISANTES: I believe is --

CHAIR RICHARDSON: Michelle Arsenault.

MR. CRISANTES: Yes.

Michelle.arsenault@ams.usda.gov?

CHAIR RICHARDSON: Yes, that is correct and she'll get it to the Board.

MR. CRISANTES: Great, I will do that.

CHAIR RICHARDSON: Thank you very much.

The next speaker is Bob Blue, and after Bob it will be Margaret Scoles. Bob, are you there?
(No audible response.)

CHAIR RICHARDSON: Bob Blue from Fetzer Vineyards?

DR. TUCKER: We don't see Bob's area code on the screen, and his name is not listed as somebody who dialed himself in.

CHAIR RICHARDSON: Okay. I do know that we have written materials that have also been sent in from Fetzer Vineyards, so perhaps that will be adequate. But Bob if you're out there, and we can't hear you, feel free to call in and see if we can add you in at the end.

So therefore, the next speaker will be Margaret Scoles of the IOIA, and she'll be followed by Val George.

Margaret, are you there?

MS. SCOLES: I'm here. Can you hear me?

CHAIR RICHARDSON: Yes, we can hear you.

Thank you.

MS. SCOLES: I am Margaret Scoles, the Executive Director of the International Organic Inspectors Association, located in Broadus,
Very appreciative of this web-based opportunity to provide comment. It's a great new way to do it. I won't be in Vermont with you, although our organization will be sending someone to that meeting. And we've already submitted extensive written comments, so I won't repeat everything that's in the written comments.

First, just a little bit more about who we are and why we're commenting. The International Organic Inspectors Association is a globally organized membership association of organic farm, livestock, and processing inspectors in more than a dozen countries. And we are the leading voice for organic inspectors.

Our mission is to address issues and concerns of organic inspectors, provide quality inspector training, and to promote consistency and integrity in the organic certification process.

Our members represent a wide range of participants in the organic sector. Two members
of our Board of Directors are certified organic farmers. And our members, although they may not be certified, see thousands of certified organic operations in the course of their annual inspections. The annual inspections are of course one of the critical components to the certification process.

About 68 percent of our inspector members are based in the U.S., but more than that, inspect to the NOP because the NOP is applicable to our members in Costa Rica, and Australia, and most other places in the world.

So, I wanted to start with a general comment. We did submit comments to each of the three subcommittees. But our focus is really on materials for farmers and livestock producers. And the reason that we chose that focus is that we think that handlers are usually -- maybe not always, there are a lot of small handlers that may be in a better position to speak to the materials that they need to stay on the list, but farmers are less likely to make the trip to
participate. And that's why I think these web sessions are so important.

And they are a lot more likely to suddenly find that a material that they use has fallen off the list. So our general comment to you as a Board is just because there aren't lots of farmers speaking to keeping a material on the list, doesn't mean it should not still be on the list.

And we reviewed all the materials that were up for sunset review and commented on most, but not all of them, because some of them we didn't necessarily have a strong opinion on.

I just chose a few to comment on. On the crop list, we think it's essential that ethylene for regulation of pineapple flowering, be kept on the list. It's just important to allow for coordinated transport of organic pineapples. And this material is equally important to all pineapple producers, no matter whether they're small or large.

And then there is some materials that
are up for review, which sometimes you wonder why
we would speak to them, because you're probably
already in favor of them. But in case you have
any questions, there are many, many producers
using liquid fish, copper, sulfur, and humic
acid.

I wanted to share something with you
from the Chair of our Board of Directors, who is
a professional agrologist. He wrote something on
humic acids and he said, humic acids are the
essential component of naturally occurring soil
organic matter.

And one of the few standards that didn't
allow for humic substances, was alkali extracted
humic acid, was the JAS standard. But now that
we have NOP/JAS Equivalency Agreement this
barrier is no longer an issue for U.S. farmers.

He inspects hundreds of farms and he
said that roughly ten percent of the organic
farms he inspected out of 200 farms, use humic
extracts. And the majority of these were in
regions with a naturally low organic matter
levels.

And so he wrote a little bit about the benefits of that, but I will just, it's an example of where you may not get lots of farmers who show up to say please keep humic acid on the list, but there are a lot of farmers who would be really startled to discover that a material that they knew was on the list was no longer there.

We also really support your proposal for changing the annotation for micronutrients. We think that's more, allows more flexibility and is very sensible. The livestock issue, I just wanted to see what -- does that mean that's my final --

(Telephonic interference.)

CHAIR RICHARDSON: Margaret, that's your five minutes up. Is this something that you've already put in writing?

MS. SCOLES: We --

CHAIR RICHARDSON: In your comments?

MS. SCOLES: Not exactly, I mean not this, not what I was just going to say.
CHAIR RICHARDSON: Okay, could you just be real quick and add it? That would be good.

MS. SCOLES: Sure, I just wanted to share the fact that I visited with a producer this summer on an inspection. And he was concerned that, he said, I hear they're taking vaccines away from us. And I, and he said I heard the fact that vaccines are off the list.

And I said, I'm quite sure that they are part of a required preventive program and the organic standards. And I'm sure that they're not coming off the list. But when I thought about it, it did seem that it was worth bringing it up that producers don't always feel that they can come to the NOSB and say, we need vaccines and so I'm saying it for them.

Actually, that's all I had to say, and our written comments have everything else. Thank you.

CHAIR RICHARDSON: Great, thank you very much, Margaret. It was very helpful and informative. I don't see any questions coming up
on my screen.

MR. AUSTIN: Jean.

CHAIR RICHARDSON: Yes, is that Harold?

MR. AUSTIN: Yes, ma'am.

CHAIR RICHARDSON: Hi, Harold. Harold is not on my screen, but he's on the phone line, so this Harold Austin in Washington, Margaret.

MR. AUSTIN: Thanks, Jean.

Margaret, thank you. I've read your comments. You started your presentation talking a little bit about the ethylene and the need to keep it for -- because it was used by all sizes of growers.

Could you elaborate on that just a little bit from the inspectors side of the -- the size of the operations or the need? That it's not just one particular segment. Is it all segments, as far as sizes and stuff, of organic pineapple producers that relied upon this material?

MS. SCOLES: It's my understanding based on the input of our Board of Directors, who sent
these comments, most of us don't inspect pineapple, but some of us do. And that was the comment of the Latin American inspector was everyone needs it, everyone uses it, this is not something that just large producers use.

Because what it does is synchronizes flowering so that the harvest can be -- get to market in a more manageable way.

MR. AUSTIN: Okay. Thank you.

CHAIR RICHARDSON: Thank you, Margaret.

The next speaker is Val George, and Val will be followed by Barry Flamm. Val, are you there?

MS. GEORGE: Hello, can you hear me?

CHAIR RICHARDSON: You're extremely faint.

MS. GEORGE: Okay, let me turn up some volume here.

CHAIR RICHARDSON: Sometimes if you're just only speak on the computer, you have to really speak up quite loud.

MS. GEORGE: Okay, is that a little better?
CHAIR RICHARDSON: That's much better, yes.

DR. TUCKER: Could we also have everybody else go on mute, please? There's some background noise. Please go on mute when you're not talking. Okay, go ahead.

MS. GEORGE: My name is Val George, and I'm a farm certification supervisor at CCOF. Thank you for your work to maintain organic integrity and also for the opportunity to share our comments. We really appreciate this. I would like to start by addressing the issue of synthetic parasiticides in organic livestock production.

Organic livestock producers primarily utilize their experience, and deep understanding of pasture management as a means of controlling parasites. Even so, there are still occasions when preventive tactics are not enough to overcome a heavy parasite load, and it is during these times that organic farmers and ranchers need tools to help keep their herd healthy.
CCOF supports the continued listing of both ivermectin and moxidectin at least until nonsynthetic alternatives are widely available. It is important to note that we do not see these products used as a crutch to support poor management, but rather in cases when there has been a documented emergency, whether through fecal tests, animal condition reports, and/or veterinarian recommendations.

While we agree that there is tremendous value in protecting dung beetles, and the organic community should remain united on that front, the problematic issue seems to be the persistent use of products like ivermectin having long term negative impacts on the beetles. Organic regulations strictly prohibit persistent and routine use.

Organic livestock producers work very hard to protect their soil biodiversity because they also know the benefits of a healthy and balanced eco-system.

I would also note that many of the
studies cited on the impact of ivermectin on dung beetles were not conducted on organic farms. And perhaps there is something to be gained from an organic system that inherently supports a more robust soil microbe community.

Similarly, concerns about parasite resistance are valid, but I would just reiterate that we do not see these products being used in a way that would lead to resistance. We see them used cautiously and as a last resort when herd health is compromised.

Furthermore, we support changes to the parasiticide annotation to ensure that these tools are only for emergency use. CCOF encourages an annotation change that includes additional required documentation that is sensible and supports organic integrity.

Organic livestock producers need tools to protect animal health. The welfare of their animals is their top priority, and having access to materials like vaccines, hydrogen peroxide, iodine, aspirin, and parasiticides provide the
opportunity to diligently maintain a whole
systems approach that supports resilient, healthy
animals, while also knowing they have sound and
practical list of allowed materials when
preventive measures are not effective and
nonsynthetic alternatives are not available.

Removing of these materials could result
in either large numbers of organic animals
removed from certification, or worse, compromise
the welfare of the animal.

Even beyond these healthcare practices,
CCOF recommends that the broader topic animal
welfare be a top priority and encourages further
research and development of standards focusing on
this area. Thank you for your time.

CHAIR RICHARDSON: Thank you very much,
Val. I have to say, that it was not always easy
to quite catch what you were saying, so my first
question is: are many of these comments that
you've just made also in the written comments
submitted by CCOF?

MS. GEORGE: Yes, most of them are in
the written comments as well.

CHAIR RICHARDSON: Okay, very good. So I don't see any questions coming up for you, so I very much appreciate your comments.

Before I turn to Barry, I will point out that Bob Blue has --- is able to call in, and we're going to add him in at the end of all the people that in sequence that we have coming up.

So the next speaker is Barry Flamm, and he'll be followed by Goldie Caughlan. If you're there and if Goldie isn't, we will move on to Steve Sprinkel because I know that Goldie may or may not be on at this time.

Barry Flamm, you're up.

MR. FLAMM: Hi, can you hear me?

CHAIR RICHARDSON: Yes.

MR. FLAMM: All right, I want to give out a special "Hello", to the Board Members I have worked with in the past. And this is the first time, figuratively speaking, that I sit on a different side of the table from the Board.

As most of you know, I'm a former NOSB
member and served on the Environmental seat from 2008 to January 2013. As a true volunteer, not receiving any compensation or any assistance from anyone.

Chair Rigo Delgado appointed me to the three committees, Crops, Compliance Accreditation and Certification, and the Policy Development Committee. And they made me Chair of that Committee soon after. I served in that capacity until being elected Board Chair in my last year. Therefore, I know something about NOSB, and my comments today are primarily about process.

There's not enough time to summarize my background but for those who don't know me, I've many years' experience in education in conservation and organic, nationally, internationally with governments, NGOs, private companies et cetera. I spent 27 years in the U.S. government, mostly in the USDA Agency.

Presently I'm engaged in conservation consulting and volunteer activities with a number of conservation, agriculture groups, including
the Montana Organic Association, which I was involved in its founding and the Cornucopia Institute as a Board member.

My first Board meeting, NOSB people meeting with us, was Spring of 2008 in Baltimore. I was very impressed by the member and the public presentations and the seriousness that the Board paid to those presentations.

Of my many public meetings over the years, this was superior. And public input was and is very important to the Board. In fact, a major duty as voice of the organic community. The Board has served a vital role from the very beginning of USDA Organic Program, holding meetings and controlling of public regulations for implementing the initial organic regulations.

When these recommendations were ignored by USDA, there was unprecedented public response leading to the regulations rewrite, excluding undesirable features such as allowing GMOs.

To guide its important activities, the Board developed a Policy and Procedure Manual,
the PPM. Policies were developed with public review and comments before the Board votes. As the Board at work matured, issues arose that was need for revision, which was done and very transparently.

And some of the proposed changes came directly from public comment. At the time of -- and none of the Board was around at this time -- the time of my appointment, Dr. Robertson was Deputy Administrator for Transportation and Marketing in AMS. The NOP was buried in that organization at that time, with a staff of only seven and a budget of one and a half million.

To put it lightly, Dr. Robertson was not an organic person, and often in conflict with the office. And did not really believe in the material concept. Then in 2008 political changed organics, substantially increased financially and added to USDA for clarity. Support for organics and pledge for organic integrity from farm to table, consumers trusted the organic label. Great, we were enthused.
The Board worked with the new Deputy Administrator, Miles McEvoy to help make this a reality. Working with Mr. McEvoy, procedures were improved. NOSB/NOP collaboration was developed by the PDC and approved by the full Board as of October 10th meeting. At the same time, the strength of organic integrity, the Policy Committee proposed a revision in the Policy and Procedure Manual for the Sunset Procedures, to better achieve the mandates of office. These changes had the support of Mr. McEvoy.

My direct involvement with the Board in these issues ended when my term expired in January 2013. However, I was taken by surprise and shocked when I learned the NOP effectively just disbanded the Policy Development Committee and indicated that the Policy and Procedure Manual was no longer in force.

The most immediate and serious result of these changes was that on September 13, Mr. McEvoy announced changes in approval of the
petition process. And most critically, the Sunset Procedures were dramatically changed, requiring a two-thirds vote to remove the listed material, rather than the required two-thirds vote to keep it from --

CHAIR RICHARDSON: That indicates five minutes. Do you have much more?

MR. FLAMM: I just have a couple points. I want to point out the concern that the authors of the -- Senator Patrick Leahy and Peter DeFazio -- expressed on the changes and urged the Secretary of Agriculture to reverse this policy.

The other thing is, my major concern is the effect this is having on organic integrity and the fact the Consumers Union has downgraded the organic seal.

What I recommend is that, to restore it and its devaluing of the organic, the seal. It's to return to the PPM August 12th, the version of then PPM and then use the process that was setup to make changes. And changes, of course, will be needed as they have in the past.
And I'd like to see the authority of NOSB restored -- the full authority -- like the development on its own, intended. Thank you.

CHAIR RICHARDSON: Great, thanks you very much. Barry, as one Chair to a former Chair, I can appreciate what it was like for you when you were chairing things. I believe I have a question on the line from Tracy Favre, who's presently the Chair of the Policy and Procedures Subcommittee. Tracy.

MS. FAVRE: Hi, Barry. Thanks for sending us your comments and your perspectives today. When you say the regular process for receiving comments and collaboration, can you elaborate on that a little bit, please?

MR. FLAMM: Yes. I think one, is that they we would consult and work together on developing the work plans. And take into account the --

(Telephonic interference.)

MR. FLAMM: ---- of the NOP, but leaving in the final decision with the Board. So it
could appropriately advise the Secretary and
fulfill its requirements.

It was a lot of trying to clarify the
staff's, clarifying and you know, the
perspective, what is now called subcommittees.
The committee would present its work plan to the
Executive Committee, this would be discussed.
And everyone would have a chance to talk about
it.

There wouldn't be any surprises in the
work plan. And that the NOP would, you know, be
able to express their needs. And it was just to
clarify what had been in the Policy and Procedure
Manual before, but to strengthen it because the
full intent was to work together for the benefit
of the organic community.

MS. FAVRE: Okay, Jean, may I ask --

CHAIR RICHARDSON: Yes, certainly, want
to follow up?

MS. FAVRE: Yes, I just wanted to
clarify, Barry. That actually is how the process
works currently. And maybe we just didn't put
language in there clearly enough to fully articulate that. But something to look at, so thank you for your comments.

    MR. FLAMM: Yes, I actually, from reading it and looking at it, I thought that section had been deleted. But it was very, I had three different computer screens up, looking at the different versions and comments. And so it was difficult for me to interpret that. So if that's the case, I'm very happy to hear that and I, you know --

    CHAIR RICHARDSON: Yes, we should probably add, Barry, that we had a heck of a time trying to do redline version I can tell you. I'm also on that subcommittee, and it proved so tough I think we all went crazy looking at all the underlining and the redlines.

    So in the end, we generated a clean document and hoped you could do your own comparison, but I agree. It's not easy to do, but I think they've -- we are making some good progress and really appreciate your comments for
that. Thank you.

Our next speaker is Goldie Caughlan, Caughlan, yes, Goldie Caughlan. Are you there Goldie?

MS. CAUGHLAN: Yes, I just got on.

Unfortunately, I was not on to hear Barry's talk. I'm sorry.

CHAIR RICHARDSON: Oh, that's okay. So the, just a few --

MS. CAUGHLAN: What did Barry speak to?

CHAIR RICHARDSON: Your name and the organization that you represent, that would be good. Thank you.

MS. CAUGHLAN: Hello. I represent my own views, but I also represent as a member of the Board of the Cornucopia Institute, and as a former member of the NOSB from January of 2001 until my five years were up, 2006.

CHAIR RICHARDSON: Okay, go ahead.

MS. CAUGHLAN: Yes, I as I say, I'm sorry that I don't know what Barry covered, perhaps I'm covering some of the same.
I was wanting to speak to a sense of disappointment at what I feel is becoming an almost intolerably difficult situation for all of the members of the NOSB, who I know from personal experience worked very, very hard and are trying desperately to work on always growing list of things to do.

But it seems to me that with the loss of the -- and perhaps Barry spoke to this -- but with the loss of the Policy and Procedure Manual, which did outline much of the intent and the types of work that, and how those should be undertaken, and which had gone through the NOSB, pardon me. Had gone through the federal register and had been approved and so forth.

And to have had that just completely plucked away.

CHAIR RICHARDSON: Goldie, I do need to interrupt you, just a slight sort of correction is that we have in fact got an active Policy and Procedure Manual, and that's what was put out for public comment.
It's an edited version of the one that was from 2010.

MS. CAUGHLAN: Yes.

CHAIR RICHARDSON: We do in fact have -- we have not lost the PPM. So if you could sort of, you know, go on from there. And Barry did talk about this a little bit.

MS. CAUGHLAN: Okay. So I just wanted to be sure that I register my concern, and thank you for that.

But also I just want to say that I think that at the time that I served on the Board, we underwent a lot of difficulty working with the leadership at the USDA. It was on ongoing situation, but we struggled through it and we had also a lot of good relationships, but it frequently became almost impossible to do our work. But again, it seemed that things were going in a much better direction. And I'm deeply disturbed to see what appears to be just an extraordinary, cantankerous, situation.

And I also feel that some of the worst
parts that really concern me, because I represented also people who everyday just go to the grocery store and get food, and are dedicated to organic, or to the best quality food that they can get for their family.

Because I worked in a consumer cooperative for more than 33 years and that was my role was to work directly with the public, which I guess was why I was placed on the Board in the first place --- just to represent the voice of the consumer.

And I do know that the food cooperative that I worked for -- which is the largest in the United States -- continues to get a lot of concerns; consumers continuing to ask questions about the quality of organic.

There's a great deal of confusion about what organic ingredients are, why are there so many synthetics, and so forth. And you know they don't understand.

I believe that a great deal of the problem is that the -- under the current
situation, there seems to be very, very huge lag
time, or difficulty in getting the technical
reviews that you as Board Members need to work
with at all times. And I feel that, that is
extremely unfortunate and also that there is no
transparency now.

We, as consumers, have no way of knowing
really what kind of support you do get
ultimately. What is the quality of those
technical reviews upon which the decision to
either place synthetics, for example, or to
utilize organics. There is just very, very
limited -- it seems to me -- transparency.

And I know that from working, struggling
to even make sense of a lot of the TRs. So we
have --

(Telephonic interference.)

MS. CAUGHLAN: -- inputs that are used
in the fields and so forth.

CHAIR RICHARDSON: Great, thank you.

Goldie, that's really good. So the five minutes
there is up, and I know that I have some
questions from Tracy Favre for you.

   MS. CAUGHLAN: I beg pardon.

   CHAIR RICHARDSON: I have questions for
you from Tracy Favre. She is currently the Chair
of the Policy and Procedures Subcommittee.

   MS. CAUGHLAN: Yes. Thank you.

   MS. FAVRE: Hi, Goldie. Thanks for your
comments today.

   MS. CAUGHLAN: Sure.

   MS. FAVRE: And appreciate your service
on the Board. I know things were a little bit of
a wild west back in the early days. And you guys
laid the path for the rest of us today.

   I have a couple of questions for you.

   Just, and I did want to reiterate Jean's comments
about the Policies and Procedures Manual. We do
actually currently have a PPM; it was presented
with proposals for public comment. And that is
in the federal register. So we do have

transparency on that document. I want to allay
your concerns in regards to that.

   And I would also just like to speak to
the collaboration between the program and the
NOSB. I'd say that you are right, it has been a
contentious relationship in the past. But I, for
one, have found the program generally --
generally --- willing to hear our counsel and
discuss points with us.

Certainly we have some constraints just
by the nature of what we are -- have authority to
implement. And sometimes we need clarity where
that line is. But so I just want to speak to
that.

But so, the comment about the TR lag
time and the quality of the TRs, I actually found
that the TRs get done in a pretty quick order,
given that the subcommittee makes the
determination on a TR requirement and then turns
it back to the program. So can you tell me a
little bit more about what your concerns are on
the lag time? And why you think that might be
taking too long?

MS. CAUGHLAN: Why do I think it's
taking too long? I don't know, it appears that.
I had some notes here, I'm trying to find them on a different screen now, and I can't find my notes. Oh, well I'll just go from -- I'll wing it.

But the fact of the matter is I know that working -- we have staff at Cornucopia that has been going through and has given many, many comments on materials that are under review for sunset and so forth.

And of course we are critical of the -- at Cornucopia representing what kinds of interests that we hear voiced from our consumers, are concerned about the fact that there is not, there does not appear to be a full transparency in who are those who actually provide those reviews.

And not only as to their training, or their ability to be the preparers, but also as to any disclosure of who they are. So who knows what their conflicts may be. So that, that can have obviously a strong effect on what you ultimately end up with.
And for the most part, those of us who sit on the NOSB are at the -- if I shall call it that -- the mercy of the quality of those TRs, which will enable us to either make a sensible safe decision or not. Right?

CHAIR RICHARDSON: So, Tracy, one last question.

MS. FAVRE: Okay, and I'll wrap this up. Goldie, I would just ask your thoughts on the depth in detail, comparing the TRs you get today compared to the old TAP reviews that were done during your tenure on Board. Can you speak to that?

MS. CAUGHLAN: Well actually we had some pretty darn decent ones by the time we waded through at least a couple of the first years. But the point was, we at least had an understanding of who those reviewers were. We were able to be relative -- we were frequently critical and would sometimes ask for different reviews because they were either incomplete, they showed a lack of understanding
of what we were asking them, or whatever.

But we also, I would agree, had much
better reviews than we had had, for the most
part, than the people that had preceded us. So
in other words, it would seem that we ought to be
able to be at a place by now where the reviews
are done by very, very, well respected people who
also have no "dog in the fight", so to speak.
Who have no conflicts of interest or whatever.

And judging by the difficulty that there
seems to be to get complete reports done, but
also the lack of transparency. And I have to
stress that; I do think it's important to know
who the TR reviewers are. And what their own
backgrounds are, because there are apparent
conflicts.

CHAIR RICHARDSON: Okay, I think we
should leave this there. I think we've got that
point. It's -- and I think it's also written in
the Cornucopia recent comments that we've also
received to look at. And hopefully we can
address more of that at the public meeting in
MS. CAUGHLAN: Thank you for your work.

CHAIR RICHARDSON: And our next presenter is Steve Sprinkel, followed by Greg Gunthorp. Steve are you there?

(No audible response.)

CHAIR RICHARDSON: Hello, Steve are you there, Steve Sprinkel? I believe also of Cornucopia.

DR. TUCKER: Steve is not listed by name, and we don't have a phone number. So I don't know what area code he's coming from. Steve if you are out there and can hear me on line. You can go ahead and chat in that you're here with the number you're calling from. Because if there was background noise, I may have muted you.

CHAIR RICHARDSON: Thank you, Steve. And if you do that, and we catch it, we will add you on after Bob Blue later this afternoon.

The next speaker will be Greg Gunthorp, a farmer. Greg, are there? Greg Gunthorp,
listed as a farmer wanting to speak on livestock
issues.

DR. TUCKER: Again, we don't see a 260
number on it, and I don't see his name listed on
the system.

CHAIR RICHARDSON: Okay, well we'll move
to the next person. Same thing, Greg if you're
there and we can't hear you, please try to
contact us so that we can fit you into the call
sequence.

So the next speaker will be Jackie
DeMinter from MOSA, and she'll be followed by
Diane Kull from Applegate. Jackie, are you
there?

(No audible response.)

CHAIR RICHARDSON: Jackie DeMinter from
MOSA?

MS. DEMINTER: Yes, I am here. Can you
hear me?

CHAIR RICHARDSON: Yes, we can. Go
right ahead, thank you.

MS. DEMINTER: Excellent. Hello, my
name is Jackie DeMinter, I am the Certification Policy Manager at MOSA. We currently certify approximately 1,600 clients, including about 700 livestock operations and around 150 handlers.

We have extensive experience with reviewing inputs and maintain an internal materials review database, which includes over 5,700 brand name products and generic materials.

We submitted six letters and one informational chart addressing several topics. I'll summarize some of our comments here. EPA lists for inerts, for both livestock and crops. We support the proposed annotation change and the modernization of reference lists. But we have a few comments and questions about the annotations.

Regarding the FIFRA 25(b) list, please clarify this list to reference the inert list, not the minimum risk active ingredient list. We assume the active ingredient review would not change.

Please also clarify the use of the safer chemical ingredient list, which is sorted in
1 functional classes. Will certifiers need to
2 verify that a particular material is used in a
3 product according to the functional class it's
4 listed under? This would add another layer to
5 the review of the material. And we can see the
6 challenge with trying to gather what is generally
7 considered proprietary information.

8 We see some materials listed in the
9 safer list under a functional class that are
10 broadly listed on the 25(b) inert list. Please
11 clarify how we are to use the safer ingredient
12 list. And also about the brand name products
13 listed by EPA as safer chemical program.

14 If the active ingredients in a safer
15 choice labeled product checks out, then it seems
16 we can safely assume the inert ingredients are
17 okay too. Please give additional guidance on
18 list use to enable consistent implementation of
19 review criteria.

20 Micronutrients on 601, we support the
21 proposed changes related to micronutrient
22 applications. We agree the diversified
approaches are valid and sensible for determining micronutrient deficiencies.

The proposed changes are practical and will allow flexibility for certifiers, and encourage better input from crop consultants. We do have a couple of questions though.

What is meant by a professional recommendation? The 2017 Sunset Review for micronutrients refers to a recommendation from a certified professional agronomist. While the micronutrient proposal refers to professional crop advisors and agronomists, we see professional recommendations from a variety of qualified individuals. As a certifier, we're required to ensure that clients are in compliance with the standard. And we already do validate sources of information. So please do not require us to start checking credentials.

We also recognize that professionals recommendations are only one of the tools farmers use to determine if micronutrients are needed. We also ask that the NOSB ensure that the list of
micronutrients referenced is accurate. The 2017 Sunset Proposal includes nickel and chromium, which are not on the national list now.

Flavors, we support efforts to require organic preference for natural flavors, but we do have some concern about method and consistency of enforcement. We request clear guidance from the NOP regarding how commercial availability criteria should be enforced in general.

We understand that commercial availability decisions must consider an ingredient's form, quality, or quantity. However, we often find it very difficult to validate a client's argument based on former quality. That challenge is exacerbated with a broad complex class of materials like flavors. We encourage NOP follow-up action on the 2006 NOSB recommendation for establishment of commercial availability criteria.

Ancillary substances, and microorganisms, dairy cultures, yeast and pectin, many MOSA-certified operations use these
materials, so over the years we've reviewed many
spec sheets. We appreciate the ongoing
consideration of ancillary substances in national
list materials. This new part of the Sunset
Review Process represents due diligence and will
provide needed clarification regarding any
substances that might be of concern.

We generally like the approach of
identifying functional classes allowed, and we
also appreciate the subcommittee's stating that
additional ancillaries that fall within those
classes do not need further review. That's
better than a prescriptive closed list, but it
will require a certifiers to ascertain functional
classes, which means more information than is
currently supplied on spec sheets.

Assuming you've done your due diligence
in identifying potential concerns and found none,
we see our review work as redundant and
burdensome. If there are materials that are of
concern, we'd appreciate an approach similar to
the listing for flavors where the annotation
eliminates such materials.

Steve Walker will be giving additional comments in Vermont, and will address the prevention strategy guidance for excluded methods. We really appreciate your work on these topics and the opportunity to give comments.

Thank you.

CHAIR RICHARDSON: Great, thank you very much, Jackie. I don't see questions on the screen. Are there any questions?

I do know that we have received a lot of written materials. I know because I've been reading them day after day. So I'm sure that at the meeting we will have more questions for the MOSA representative. Thank you.

The next speaker is Diane Kull, and she'll be followed by Kevin Engelbert. Jackie, are you there -- or sorry. Diane, are you there?

(No audible response.)

Diane Kull from Applegate?

DR. TUCKER: Okay, Diane we're not. Is she 908?
CHAIR RICHARDSON: Yes.

DR. TUCKER: Okay, I may have muted her if there was background noise. Diane, try again.

MS. KULL: Okay, can you hear me?

CHAIR RICHARDSON: Yes, we can hear you, yes.

MS. KULL: Okay, so I wanted to comment. I'm with Applegate, and I wanted to comment on the celery powder, Sunset Review. As Applegate is the leading brand for natural and organic meats, I'm taking this opportunity to express the importance of celery powder.

Celery powder is currently an allowed ingredient on the NOP list for use in organic processes, and this ingredient will be discontinued on June 27th, 2017 unless renewed by the NOSB.

We understand that the NOSB is reviewing celery powder this month at the fall meeting, and I am to speak today in order to highlight the importance of this ingredient for the continued growth of Applegate's organic meat sector.
I'd first like to acknowledge how much I appreciate the work done by the NOSB, the subcommittees on the 2017 sunset review of so many materials, including the one I speak of today. Organic products make up about 30 percent of Applegate's portfolio, but they play an even more significant part in our growth strategy as they will make up a greater percentage or our total sales in coming years.

According to ----

(Telephonic interference.)

MS. KULL: ---- Applegate is far and away the largest brand of naturally cured organic meats in the regional space, with products utilizing celery powder totally roughly 60 percent of our total organic sales.

Without the use of celery powder, much of these products and our growth will be severely halted in 2017. As our consumers demand more organic choices, I would like more time to work with industry partners to secure an organic source.
I will speak to some specific questions the committee had in regards to this ingredient. In regards to commercial availability, we continue to work on the problem of commercial availability for a viable organic alternative.

An industry working group of the leading producers of celery powder, including Kerry Ingredients, Diana Foods, and Florida Food Products, as well as our leading competitors in the organic space, Organic Prairie and Coleman Natural, as well as research institutions has been formed to find an alternative. The group has expressed a united message. Additional time is needed to find an acceptable replacement for celery powder.

Applegate has been a significant contributor to this effort. As we research alternative vegetables we uncover more challenges. For example, in ensuring a consistent high quality level of nitrates while being able to verify no additional environmental nutrient runoff. We are confident that if given
the time, an organic source will be developed.

As far as food safety, celery powder is a tool for introducing cure for food safety into organic products. It has been the vegetable of choice to culture for the conversion of sufficient nitrate to nitrites to provide the necessary pathogen control to assure food safety. Today a suitable organic alternative has not been found. Additional to food safety, organic processors need this tool in order to continue to use as many cuts of the organic livestock as possible.

Celery powder continues to allow Applegate to use some cuts of the animal, for example trim and bellies, which would not be possible without an organic curing solution. This ingredient is critical for whole animal utilization. Human health impact of celery is a source of nitrates. Processed meat is a minor source of nitrate, nitrite in the human body. Normally the biggest dietary source of nitrite is, in fact, vegetables.
The body also manufactures nitrates for body function. Bacteria in the mouth and gut reduce nitrate to nitrite just as bacterial culture is used to convert the nitrate in celery powder to nitrites. Some research indicates nitrites are actually beneficial to human health.

How we want to use the next five years?

As I mentioned previously, an industry working group has been formed and is committed to the goal of finding organically grown vegetable for curing meat naturally. This panel of stakeholders, which will be under the Organic Trade Association, need this additional time to develop and research alternatives for celery powder.

In summary, celery powder has been critical ingredient of Applegate ham, bacon, and hotdogs, and is needed to develop color, texture, flavor, functionality, to improve food safety, and to meet the consumer's expectations of a cured meat attribute.

There's no sort of suitable organic
alternative today. Applegate is proud to have been a leader in the naturally cured meat segment for the last 28 years, producing an array of both organic and natural products. And we are working with our industry partners to develop suitable replacements. We strongly urge the NOSB to allow the continued use of celery powder in organic products beyond 2017. Thanks very much for the opportunity to comment on this critically important ingredient.

CHAIR RICHARDSON: Thank you very much Diane. A very clear presentation, and I know that I've also received from Applegate some written comments that most of us I'm sure, have already read. Are there questions from any Board Members? I don't see any coming up on my screen.

(No audible response.)

CHAIR RICHARDSON: And I'm not hearing from Harold, I'll call Harold on phone. So thank you, Diane.

MS. KULL: Yes.

CHAIR RICHARDSON: And we'll move on to
Kevin Engelbert, and he'll be followed by
Victoria AlvarezáSaavedra.

MR. ENGELBERT: Hello.

CHAIR RICHARDSON: Kevin, are you there?

MR. ENGELBERT: I hope so.

CHAIR RICHARDSON: Yes, I hear you, Kevin.

MR. ENGELBERT: Okay. My name is Kevin Engelbert. My family and I operate a certified organic, dairy, beef, and crop farm in upstate New York, a little town called, Nichols. Our primary source of income is the dairy. We ship the majority of our milk to Organic Valley, but we divert a small amount for our own label cheese. We also raise 20 to 30 hogs a year that we sell under our label, and we do a small amount of vegetables, primarily my wife does that. We market at our farm store, at restaurants, and stores within our area.

Our farm was the first certified organic dairy in the United States. That doesn't make us better than anybody else, but I mention that fact
because I think it's important for those of you who are listening to know that I've been involved with organic agriculture for a very, very long time. Or I should say a relatively long time.

I'm also a farmer NOSB member with my last meeting on the Board taking place five years ago. I remember when I got on, I couldn't imagine how long it would take to fulfill that commitment. But it happened so fast, I can't believe it's been five years since I was on.

During my time on the Board, I came to develop a great deal of respect for the Cornucopia Institute, and I'm currently the Vice President of that Board. While I don't agree with all the decisions made or the actions taken, I do believe wholeheartedly in their mission to preserve the integrity of organic agriculture. While I was on the NOSB, I came to trust them as an unbiased, reliable source of information. And I would encourage you Board Members to do the same. The facts that the Cornucopia Institute provide you ahead of your meetings are unbiased,
My comments today are general in nature, and I've taken the time to do so because I am very disheartened at the changes that have taken place with the National Organic Program since I left the Standards Board. The writers of OFPA created the National Organic Standards Boards and gave it somewhat statutory authority to protect farmers and consumers from the moneyed interests that they knew would have undue influence on the program. And yet, moneyed interests do seem to be in control.

Some examples are: one, the makeup of the National Organic Standards Board and the secrecy with which appointments are made. Two, the National Organic Program trying to take control of, and lead the National Organic Standards Board's meetings. Three, the change in the sunset process with absolutely no public input, which makes the removal of materials on the list, the national list, virtual impossible.

Next, only allowing three minutes for
public comment at NOSB meetings, which is obviously meant to discourage public participation. The first day of my meeting on the Board lasted 14 hours. We did whatever was necessary to ensure that anyone who wanted to make public comments, was able to do so, and we encouraged people to do so.

Next, the NOSB doesn't determine who will write the technical reviews, or even what materials need them. The authors of the TRs are now secret, so conflicts of interest and competency cannot be evaluated by the public.

The NOP now determines what the NOSB can and cannot work on, instead of just offering suggestions regarding the subjects and materials they would like recommendations for.

Next, the attempt by the NOP to do away with the Policy and Procedures Manual. Next, a general lack of respect by the NOP for the long, well established relationships that has existed between them and the NOSB, as well as a lack of transparency in the work done and the decisions
that are made. An elimination, the elimination of the National Organic Standards Board's ability to use annotations to limit the use of materials on the national list.

Next, the forming of a Hydroponic Task Force after the National Organic Standards Board made a recommendation that hydroponics does not fit the definition of organic agriculture, and that there should not be hydroponics or aquaponics allowed in organics. And lastly, a lack of enforcement by the National Organic Program of existing rules, and especially the Pasture Rule. When I was on the Board, I was told many times that any recommendation that we made had to be scale neutral, which I wholeheartedly agree with. But the rules are not being enforced on a scale neutral basis. Factory operations produce a larger, and larger percentage of the organic milk supply --

CHAIR RICHARDSON: Are you about done, Kevin?

MR. ENGELBERT: Yes, I am. I only have
another paragraph.

CHAIR RICHARDSON: I'll tell you what, let's just, I know you've had your five minutes. I'm going to be a bit of a bully here. I'm sure we have some questions that will come in, but I did want to clarify before you take other people's questions that we actually do determine the TRs, and we've been demanding lots of them, and we've been getting them, so just to clarify and perhaps correct your thinking on that.

And also as regards annotations. We have a mechanism for doing annotations, and I thought that that was clear, but I think I'm going to have to explain it again at the beginning of the meeting to everybody again.

MR. ENGELBERT: That's great.

CHAIR RICHARDSON: We're going to be putting in separate annotations, they're not, so in other words we're voting on Sunset Materials as separate individual materials, and then the annotations, there will be separate annotations that we'll be generating.
I think we have some at this meeting. My brain is already scrambled, I've been reading so much stuff. But certainly, we'll have a bunch of them in the April meeting. So we do have a handle now on how to effectively do annotations so that there is even better transparency for all the members of the public to know about the annotations, prior to us coming to a public meeting and voting on them.

MR. ENGELBERT: Good.

CHAIR RICHARDSON: So let me turn over and ask some questions, a few that, Tracy you had a couple of questions or comments you wanted to make to Kevin?

MS. FAVRE: Yes, actually. The main one was to clarify the point about the annotation change, so I appreciate that, Jean. Kevin, again thank you for your service on the Board. You like other past members, can really appreciate the buck load that we've had, and the effort that goes into our deliberations and our discussions.

So I appreciate your perspective. I'd like to
hear a little bit more about your thoughts on the 
access to pasture for livestock.

     MR. ENGELBERT: In what respect, Tracy?
All I can, you know I have a lot of sources of 
income. I don't want anybody to assume that the 
only organization I belong to, or get information 
from, is Cornucopia. It's not. I belong to 
quite a few, I've tried to stay connected. And 
my comments reflect my thoughts from what 
information I've been able to gather.

I'm just, you know the fact that these 
operations are not providing pasture is extremely 
detrimental and discouraging. We continue to 
have organic farms in the New York sell out. I 
think we've had six sell out in the last two 
years. And there's still more that are putting 
their farms up for sell, either because they 
can't make it financially, or they don't have 
anyone that wants to take over given the outlook, 
on the outlook.

     MS. FAVRE: Well, maybe you'd let me 
offer this question for clarity: were you
speaking about pasture for poultry, or you were speaking pasture for ruminants?

MR. ENGELBERT: I was speaking pasture for poultry, but it also includes outdoor access for poultry. We have a small organic grain business, and we provide grain for small operations that are raising either layers or broilers. And we've had three of them quit in the last two years because they can't compete with the organic eggs and broilers that are on store shelves. And they can't convince people that there's a difference in how they do it, as opposed to what they're buying on the shelf.

MS. FAVRE: Right. And along those same lines, I actually agree with you. And I think all of us are eagerly looking forward to the Animal Welfare Standards. Have you had a chance to review those standards, and do you have thoughts on that?

MR. ENGELBERT: Well, we started working on them way back when I was on the Board.

MS. FAVRE: That's right.
MR. ENGELBERT: And to be honest with you, I haven't looked at them closely since that time. No, I have not.

MS. FAVRE: Okay. All right. Thank you very much.

MR. ENGELBERT: Yes, thank you.

CHAIR RICHARDSON: Yes, thank you Kevin. We're all pushing the NOP and the USDA to get out the Animal Welfare Standards. It's so critically important. It's very frustrating. Thank you.

MR. ENGELBERT: I'd like to say, I'd just like to close with you know the work that you're doing is very important. And it's a matter of public record, not just now, but forever. And once, you know, eventually the history of the NOSB and the NOP is going to be written. And you know the work you're doing is so important, I wanted to take the time to thank you for listening to my comments. And specifically a thank you to the NOSB members. I know first-hand how much time you spend on NOSB work, and I'm very appreciative of it.
CHAIR RICHARDSON: Thank you, Kevin. We appreciate that. Mostly, we get a lot of grief, so it's nice to understand what we're doing.

MR. ENGELBERT: I've been there and done that many times. And I often thought if I got grief from every side, we were probably pretty close to what needed to be done.

CHAIR RICHARDSON: Yes, exactly. I agree. All right, thanks Kevin. Our next speaker, Victoria Alvarez-Saavedra, and she'll be followed by Jane Parker. Victoria, are you there?

MS. SAAVEDRA: Yes, can you hear me?

CHAIR RICHARDSON: Yes.

MS. SAAVEDRA: Okay, excellent, thank you. I'm speaking on behalf of FEMA, the Flavor Extract Manufacturers Association of the United States. We want to appreciate the opportunity to comment. And I also want to thank the NOSB for the hard work ensuring the integrity of organic products. Again, I'm talking on behalf of FEMA the Flavor Extract Manufacturers Association.
And I work for a flavor company, so I would like to also give you some information on that. Again, my name is Victoria Alvarez Saavedra. I'm the leader for the FEMA Organic Task Force. I'm Vice Chair for the FEMA Flavor Labeling Committee, I'm also Vice Chair for the IOFI RAAC. IOFI is the International Organization of the Flavor Industry, and RAAC is the Regulatory and Advocacy Committee.

I'm Director of Regulatory Affairs for Virginia Dare and I've been working for Virginia Dare for the last 16 years. Virginia Dare is a manufacturer of organic certified vanilla extract and some other flavors, but mostly extract. On behalf of FEMA, I would like to say that FEMA has been working in collaboration with the OTA and certifiers for many years to develop a Natural Flavor Questionnaire to help ensure the integrity of the organic program.

FEMA was founded in 1909 and is based in Washington D.C. FEMA members include not only flavor manufacturers but flavor users, food
companies, flavor ingredient suppliers, and other
who are interested in ensuring the supply of
flavoring materials. FEMA members manufacture
and market more than 95 percent of all flavor
sold in the United States and creates flavor for
use in a wide variety of foods and beverages.

FEMA has a long standing history of
working with regulatory authorities. FEMA
members create flavors for you to have a wide
variety of foods and beverage products, including
both certified under the NOP regulations. FEMA
supports the continued usage of non-synthetic
flavors in 205.605(a) on the national list. Also
FEMA would like to state that we generally
support the NOSB handling subcommittee
recommendation, annotation change for flavors on
205.605(a).

And also, we'd like to highlight the
following very important point: the supply of
organic flavors is not sufficient to warrant the
sunset of non-synthetic flavors from 205.605(a).
Although there has been an increase in the number
of organic flavors that have been developed, organic flavors are not available in sufficient quantities, quality, and form to satisfy current demands.

Non-synthetic flavors should remain on 205.605(a) of the national list, but could be subject to commercial availability if the organic flavor is available in sufficient quantity, quality, and form. Because there is insufficient availability of organic flavors to satisfy current demands, removing non-synthetic flavors as a category from 205.605(a) of the national list will create lasting and significant market disruption in the processed organic food sector.

However, when organic flavor is commercially available in sufficient quantity, quality and form to satisfactorily function in the finished organic product applications that would be required by the NOSB handling subcommittee recommended annotation change, that organic flavor should be used. Non-synthetic flavors must remain on 205.605(a) of the national
list even if flavors are subject to commercial availability.

Again, we would like to say there is insufficient availability of organic flavors to satisfy current demands. And the removal of non-synthetic flavors as a category from 205.605(a) of the national list would create significant market disturbances because so many processed organic products utilize non-synthetic flavors for which there is no organic substitute. Additionally, removing non-synthetic flavors from the national list puts into jeopardy the many organic products already on the market that currently utilize non-synthetic flavors.

The NOSB has at least on two other occasions retained a category listing on 205.605(a) while adding an annotation. Any regulatory action should both encourage further organic development in the flavor categories, and also maintain the integrity and supply of processed organic food products that utilize non-synthetic flavors., but cannot ignore its issues.
of supply, quality, or functionality to utilize current available organic flavors.

Flavors are essential to the continued success of the processed organic food sector. Processed organic food production has enjoyed market growth over the last several years. Processed organic food consumers expect that both organic food products meet the federal standards and also meet their taste and sensory expectations. Flavors help ensure that the consumers are delighted by the organic foods that they consume.

FEMA appreciates the opportunity to comment on the hard work of the NOSB. FEMA urges your consideration on this important matter as you finalize the non-synthetic flavor Sunset Review and evaluate the NOSB handling subcommittee recommendations to change the flavor annotations. Again thank you for this opportunity to comment and we would like to make sure that we're available if you have any comments or need additional assistance. Thank
you again.

CHAIR RICHARDSON: Thank you very much, Victoria. I'm not seeing any questions coming up from the NOSB members, and it's been certainly --

(Telephonic interference.)

CHAIR RICHARDSON: -- large body of material from the flavor industry, including some from your own company. So we have I think a large amount of very useful information to help guide our voting on this subject. It's complex. Okay, thank you, Victoria. I'd now like to move on to Jane Parker to speak, and she'll be followed by Aishwarya Bala -- it's a difficult name for Jean, Aishwarya Balasubramanian. So Jane, are you there?

(No audible response.)

CHAIR RICHARDSON: Jane Parker from Gourmet Garden?

DR. TUCKER: Jane, I don't know the area that Jane is calling from. It's an international number so I'm sure exactly what number off the list, but Jane, are you out there?
CHAIR RICHARDSON: Brian says she's Australia.

(Telephonic interference.)

CHAIR RICHARDSON: -- if we can't make contact with Jane, we could move on to Aishwarya?

DR. TUCKER: Jane, if you're on, you can go to the site and test us on the chat button, and then I'll know what number you're calling from. If you let me know what your number is. Can you hear us?

(No audible response.)

DR. TUCKER: Touch your chat menu on the bottom left of your screen, if you can hear me.

CHAIR RICHARDSON: All right, Aishwarya are you there?

MS. BALASUBRAMANIAN: Yes, can you hear me?

CHAIR RICHARDSON: Yes, we can hear you, Aishwarya would you please state which company you're from and present your comments. Thank you.

MS. BALASUBRAMANIAN: I thank for, I
know my name is quite a feat. Good afternoon all. First I would like the Board and everyone present today for your time and the opportunity to speak to you all. During our last webinar here, some of you might have heard, West Mathison, son of Kyle Mathison, who are organic apple growers, mention the need for 1-MCP for organic apples. And here is just that we stand on that.

We at AgroFresh have collaborated for over 15 years with apple growers globally to help maintain post-harvest quality of apples, during storage, and distribution. Our product, SmartFresh is simply 1-MCP gas trapped in natural sugars. Like the Mathisons, we meet a lot of organic growers who understand the need for SmartFresh in organic apples. And I wanted to give an introduction about SmartFresh, it's safety and benefits in this webinar.

So let me start with: what is SmartFresh? As I mentioned SmartFresh is 1-MCP gas molecule, stabilized in natural sugars. It
is used in airtight rooms, where it's similar to ethylene gas used on organic bananas in banana rooms. So the apples are first picked at a good color and good maturity, and then is taken to storage rooms where SmartFresh is mixed with plain water in the closed rooms to help get 1-MCP out.

Next, what does SmartFresh do? So before we get into that, I need to let you on to the basics as to what ethylene does for apples?. Ethylene is a natural plant hormone, as many of you know. And it's produced internally in apples. So it is responsible for all the great things such as color, flavor development.

But it is also responsible for aging the fruit, and it causes the fruit to soften, become mealy and rot. So for ethylene to work in apples, it needs specific sites, what we call the ethylene receptor sites. So ethylene goes and binds to these sites and triggers production of more and more ethylene.

So SmartFresh basically makes fewer of
these sites available for ethylene to bind, and
this slows down the production of more ethylene.
So it takes a longer time for apples to soften
and rot. The use of SmartFresh we have seen as
much as doubles the storage life, and since it
takes longer for the fruit to age, it makes
fresh, crisp, local apples available for
consumption for a longer period.

SmartFresh is safe. It is very
effective at very low levels. So in apples, if
you take a thousand cubic foot room, that has
about 7500 kilograms of apples, and we recommend
a level of 59.4 milligrams of 1-MCP. So when
used as recommended, it does not leave any
residue on the fruit, and it gets metabolized
just like ethylene does.

If you can Google, 1-MCP is one of the
most researched and well documented compounds,
globally, due to its non-toxic and non-persistent
effect in slowing down ethylene activity.

How are organic apples stored now? They
are stored and controlled in atmospheric storage.
But the storage life date is relatively short and once they are through, they are taken out of storage, there is a discernible quality loss. And because the fruit tends to ripen faster and it leads to softer fruit which is not ideal for consumption.

So the wastage is not just the wastage of fruit that is unavailable for us to eat, but also wasting the resources used for production, storage, and transit. So SmartFresh we believe could help prevent this waste, and also give organic growers the peace of mind that their fruit will provide consumers with satisfying experience long into marketing season.

The other thing, CA, it may not be feasible for small farmers supplying local markets to use CA. We worked with small farmers, for example we have one, a low spray, environmentally friendly orchard, and SmartFresh is used on their eco apples. They consider it a great tool to help provide consistent quality apples for consumers, and help them keep local
So we continue to hear from organic growers and they clearly recognize the benefits that SmartFresh can bring. I want to conclude by saying, there's no greener technology available today to improve the quality of their fruit they use that make local apples available longer in the market place. I want to thank you again for this opportunity to introduce my comments. Thank you.

CHAIR RICHARDSON: Thank you very much, Aishwarya. Are there specific questions from the Board? I'm sort of hoping that Harold, you could help us with a question here from your perspective as an apple grower.

MR. AUSTIN: Yes, ma'am. I am ready.

CHAIR RICHARDSON: Okay.

MR. AUSTIN: Aishwarya, thank you for your presentation. Two points of question I guess. One would be, with the application of the MCP-1, exactly what would be the benefit of the grower? I mean we pick the apples, we put them
into the cold room. Could you elaborate just a little bit what would that do for the storage ability and the quality of the fruit coming out the other side?

MS. BALASUBRAMANIAN: So thanks, Harold, and you can call me Ash. It helps, I guess. So does 1-MCP, or -- 1-MCP in SmartFresh basically increases the window of storage. And again, as much as double the window of storage. What it does is once you put your apples in storage and when they come out there are a lot of issues that can happen.

Like, once the fruit comes out, it can soften very fast. The other thing is they can also develop storage scald, which is the browning of the skin. There are a lot of things that can, so an organic grower puts the apples inside a room, storage room and when it comes out after six months say, he wouldn't know what is the quality of the apples.

So SmartFresh over 15 years, we have helped apple growers protect the quality and when
the fruit comes out it is still crisp and fresh to eat. And it undergoes the natural softening process, like any other apples, but it takes a slightly slower than the normal process.

MR. AUSTIN: Thank you, so we use it on a lot of our conventional packed and stored apples. Will you be coming forward with a petition to add MCP-1 on the national list for the handling as a material? Or is this going to be a product that going to be reviewed, that's going to go through one of the certifiers?

MS. BALASUBRAMANIAN: We are planning to get a petition in as soon as possible.

MR. AUSTIN: Okay, and this will be strictly for the warehouse use, or would there be any indication that this would be also looked at as field juice as well?

MS. BALASUBRAMANIAN: We are currently looking into the warehouse use for the storage, post-harvest handling. But we would be also think about putting about a pre-harvest.

MR. AUSTIN: Okay. Thank you. It's a
wonderful tool if we can get it.

MS. BALASUBRAMANIAN: Thank you.

MR. AUSTIN: Thanks, Jean.

CHAIR RICHARDSON: Thank you, Ash. That was very interesting comments and for your questions, Harold. So now we come to I think, Bob Blue. You are out there now. And our time's gone but --

MS. ARSENAULT: Jean, can you hear me okay? We have a question from Zea, who can't --

(Telephonic interference.)

CHAIR RICHARDSON: Okay, you have a question for Ash?

DR. TUCKER: Hello.

MS. BALASUBRAMANIAN: I'm here.

CHAIR RICHARDSON: Aishwarya, are you speaking?

MS. ARSENAULT: Hello.

MS. SWAFFAR: So can you hear me?

DR. TUCKER: Yes, we can hear you, Zea, go ahead.

MS. SWAFFAR: Well my question was the
was the same as what Harold ended up asking which
is, petition is usually the way to approach this
first. And you didn't say whether it was a
synthetic gas or not, but I suspect it is. And
you really need to petition.

MS. BALASUBRAMANIAN: Thank you, Zea.
Yes. We are submitting it shortly. Thank you.

MS. SWAFFAR: Okay. That's all, thanks.

CHAIR RICHARDSON: Thank you, Zea. The
next speaker is Bob Blue. Bob, are you there?

MR. BLUE: Yes, I'm here. Can you hear
me?

CHAIR RICHARDSON: Yes, we can, clearly.

MR. BLUE: Great. So my name is Bob
Blue. I'm Director of Wine Making at Fetzer
Vineyards. I've been with Fetzer for 27 years.
I'm the founding wine maker of our made with
organic wine, which started as a Fetzer wine in
1990. And then in 1994 we launched Bonterra as
our flagship organic brand.

And our growth has been steady, and we
started modestly. We're at 400,000 cases now.
The wine's in 35 countries with nice accolades, I'd like to think. And we work with about 35 organic growers, and we have about 950 of our own acres. So to just give you a sense of our scope. We have submitted written comments for ascorbic acid, carbon dioxide, potassium acid tartrate, which is cream of tartar, ozone, and sulfur dioxide. All of these inputs are important and we want them to continue to be available for wine made under the NOP rules.

Of these, the most important input is SO2. Sulfur dioxide, you know, has a long history use, first noted in the Roman times, but more importantly in the early 19th century. It's naturally occurring in fermentation, whenever you have a fermentation, you get at least usually ten parts per million estimate, but up to 30 parts occurs naturally.

For us in wine making, we use it in a couple of different points in time. It's very important in the beginning, when we first receive the grapes. And we've pressed, we're starting
the fermentation process. We add a little bit of sulfur dioxides as an antiseptic. It's very effective in killing bacteria which compete for resources with the yeast, and it inhibits some of the sort of weak yeast that come in with the grapes.

It also neutralizes oxidative enzymes. So in the case of something like Sauvignon Blanc, where you want the wine to be very fresh, and you want to preserve some of the green qualities of the fruit, the sulfur dioxide actually inhibits the browning enzyme and keeps the juice very fresh. And then you get, it reveals that quality of the Sauvignon at the end.

After fermentation, after fermentations are complete, whether it's a yeast fermentation and in the case of red, after a natural malolactic fermentation, we add another small amount of sulfur dioxide to stabilize the wine. And then prior to bottling, in the process of bottling, there's always an intake of oxygen, and so adding an addition right at the very end, as
an antioxidant, sulfur dioxide grabs oxygen and protects the wine from the oxygen molecules. And then the wine can just age naturally in the bottle.

So for us there's really just no alternative to SO2. You know, over the history of wine making, we've worked on sanitation and temperature control, carbon dioxides to blanket wines, and the use of ozones, and those sorts of things to reduce the amount. And in the made with category, you know we're limited to 100 parts per million. The national, the U.S. standard is 350 parts per million and so we're well under that. And I think it's very responsible use and very important to the overall quality of the wine.

Without it, it makes it difficult to use barrels. So you know, when we extract wine from barrels, they want to spoil very quickly and so sulfur dioxide gas is used to keep the bacteria load down until we can fill the barrels again. And then in the aging process in the barrel,
that's an area where you can have spoilage very
easily, and in the case of sort of fresh wine,
making really fresh wine, especially white wines,
the antioxidant property is key to quality.

So without it, it's going to really have
an impact on the quality of our products, the
longevity of our product, which will impact us
economically. And all of our growers, everyone
will be impacted. So in closing, we ask the NOSB
to allow the continued use of these wine making
materials, especially sulfur dioxide, to ensure
that we can continue to produce quality wines.

CHAIR RICHARDSON: Great. Thank you
very much, Bob. I know that you've also
submitted written comments which I've read. So
I feel like you've provided us with a lot of very
useful information. And I'm looking to see if
anyone has any questions out there on the
computer. I don't see any, or on my email
calling in, so I don't see any questions but your
presentation is very clear and helpful. Thank
you.
MR. BLUE: Thank you.

CHAIR RICHARDSON: Let's now turn and see who that's left out there that would like to talk, that did not come in when we called them. I'll work from the top down. Is Robert Larose anywhere out there?

(No audible response.)

CHAIR RICHARDSON: What about Steve Sprinkel?

(No audible response.)

CHAIR RICHARDSON: If you're talking, you're on mute and we can't hear you.

CHAIR RICHARDSON: Greg Gunthorp?

(No audible response.)

CHAIR RICHARDSON: And lastly, Jane Parker?

DR. TUCKER: Jean, Greg is on the line, but maybe he's muted, and --

CHAIR RICHARDSON: Greg, Greg Gunthorp is on the line, okay. Greg, would you like to say something?

DR. TUCKER: He got on, but maybe he
dropped off again, but I don't have a 267 number anymore. He was on for a little bit, but then he dropped out.

CHAIR RICHARDSON: Okay. Thank you. And then Jane Parker from Australia?

(No audible response.)

CHAIR RICHARDSON: Jane are you out there anywhere?

DR. TUCKER: We decided it's 3 o'clock in the morning in Australia, and she probably decided not to join us.

CHAIR RICHARDSON: Yes, I can imagine. Oh, that's dedication. Hopefully she sent in comments in writing, and then we be sure to see them. Actually I believe they did. I know I've read a lot on sodium lactate and potassium lactate which she was going to talk on. So, that in my reading here, correct me if I'm wrong here, Jenny. Seems like we've got through everybody that wanted to speak on this call.

DR. TUCKER: I've now unmuted everybody that doesn't have a name. If you are one of the
people that Jean just called, you had signed up
for public comment in advance, but did not get a
chance to talk, please speak up now. We'll count
to five. Okay, I don't think anybody wants to
talk.

CHAIR RICHARDSON: I don't think so,
okay, we haven't missed anybody. That's good
because we're trying to do this right. So in
wrapping up this afternoon, I'd just like to
thank all of you enormously for being on this
call for this length of time. We still have 36
people left on the web and 58 on audio. So we've
had a really good turnout for this, as we did for
the first webinar.

I'd like to comment on Kevin Engelbert's
statement that, how he didn't like to have just
three minutes at the face-to-face meeting, and I
agree that's tough. And we might be able to do
four in April when we don't have all the Sunset
materials to deal with, like we have this fall.

But we are trying to avoid those 14 hour
days that they used to do on the NOSB that Kevin
mentioned. We're trying to make sure that we can expand the ability for people throughout all of the NOP certifying world, and as you see we're getting calls from overseas, which is fabulous.

And by putting on these comment, public comment webinars at this point in the public comment sequence that we have to deal with, and I think it's going to be just great. Because it means that we won't have to have 14 hour days, and we hopefully can expand the time to four minutes, as I say, in the Spring for the public speakers. And generally we find four minutes is pretty darn good.

And I just want to say how pleased I am at how this has gone. And I hope you did too, and look forward to seeing those of you who can come, come to glorious Vermont. And I'll try to keep the snow away from the town where you are, but let it get to the mountains. And thank you very much. I'll turn it back to Paul in the office, at this time, Paul.

DR. LEWIS: Great. Thank you again, and
thank you for your leadership serving as Chair
for the Board, and for really moving us forward
to again, the successful webinar that we've had.
And again I want to thank all the Board Members
for being part of the call for several hours
today. And looking forward to meeting all of you
face-to-face next week as we continue our NOSB
meeting in Vermont. Thank you.

CHAIR RICHARDSON: Great. Are we done,

Jenny?

DR. TUCKER: I think we're done.

(Telephonic interference.)

DR. TUCKER: And who's that speaking?

MS. PARKER: Jane Parker.

DR. TUCKER: Hi, hello. Jane, it's

Jane. Jean, are you still on?

CHAIR RICHARDSON: I'm still on Jenny.

Jane, I'm Chair of the NOSB. If you have

comments that would be great.

MS. PARKER: Okay, thank you very much.

It's Jane Parker from Gourmet Gardens --

(Telephonic interference.)
MS. PARKER: -- sodium lactate. Thank you for giving me the opportunity to talk today.

(Telephonic interference.)

MS. PARKER: -- sensitive to degradation. And therefore it's difficult to maintain their integrity even in a ----

(Telephonic interference.)

MS. PARKER: ---- and traditionally these herbs have been preserved by drying, cooking, freezing. And although these methods worked well for fruits and vegetables, they result in degradation of the oils in herbs and spices.

Inherent with spices, because of their nature and depending on how they're grown, the traditional methods of preservation are at high risk of contamination. The contamination listed is, to an extent, mitigated by the fact that they're used is such small amounts. As a current example we have the contamination issue --

(Telephonic interference.)

MS. PARKER: -- cyclospora, which we've seen over a thousand cases in three years. And
what we use on the herbs and spices is actually
heirloom technology, which combines several
preparation methods. And not from the
preservatives, but it's growing the plants
correctly for the environment, harvesting it in
the correct season and correct time of day,
storing at the correct temperature, washing and
sanitizing.

And while ----

(Telephonic interference.)

MS. PARKER: ---- enough to do all these
things, and combine them, and that's where sodium
lactate comes in. It's got a really diverse
functionality which provides additional hurdles
for maintaining safety and the integrity of the
food.

If you're having spice bases infused to
maintain product safety, integrity by functioning
within a single product as an microbial agent and
anti-pathogen, which includes the function of
acidity control, buffering and water activity
control throughout the whole shelf life of the
As an acidity control agent, the product pH must remain within a critical range. At high pH, microbes can pose food safety and quality issues, such as several documented cases of botulism in garlic stored in oil due to uncontrolled pH levels. At low pH, certain compounds such as chlorophyll become unstable, resulting in a loss of integrity.

Another buffer, because the natural pH in raw herb and spice vary by day, by grower et cetera, a buffer prevents this pH fluctuating within the natural variability and keeps the pH of the final product within the safety region. And to achieve a buffer requires an organic acid and organic salt such as sodium lactate.

And as a microbial, the lactic acid portion of sodium lactate is part of its important antimicrobial function. And lactic acid is particularly known for its effectiveness in controlling the growth of bacteria such as Listeria. But with GG paste we need to add
lactic acid in the base form of the lactate following the acid form.

The acid form provides the necessary antimicrobial properties but it does not provide the buffer that I talked about and the water control activity, its water fighting properties. Maintenance of the water activities of the product within the desired range is critical for the control of undesirable microbes.

And sodium lactate imparts many different functional attributes in the product, and we understand there is no other single ingredient or even combination of ingredients that can take its place and effectively control

(Telephonic interference.)

MS. PARKER: -- finally, over ten years of research has been spent on examining replacing sodium lactate with other ingredients. And the result --

(Telephonic interference.)

MS. PARKER: ---- we believe that putting sodium lactate in the national list will
give organic growers a critical antimicrobial ingredient, pathogen inhibitor, to protect consumers from food borne illness such as listeria and botulism, contamination that traditional preservatives such as sugar, salt, and smoke aren't able to prevent. We also believe that, as shown by our current research that sodium lactate application is outside the --

(Telephonic interference.)

MS. PARKER: ---- and sincerely request that this be considered. Thank you.

CHAIR RICHARDSON: Thank you very much, Jane. Now isn't it 3 o'clock in the morning in Australia?

MS. PARKER: No, it's 5:20, no it's just after 5:00.

CHAIR RICHARDSON: 5:00 a.m.?

MS. PARKER: After 5 o'clock, yes.

CHAIR RICHARDSON: Oh, well that's not so bad. You're a farmer, you're probably up by now, that's good.
MS. PARKER: Yes, I'm happy to say, it's light. It's bright, so it's okay.

CHAIR RICHARDSON: We have received quite a lot of comment on sodium and potassium lactate, and your presentation here today was very clear and very helpful. And checking to see if there are any questions from our NOSB Board Members of whom are listening also on line. Are there any questions --

MR. AUSTIN: Can I speak?

CHAIR RICHARDSON: Yes.

MR. AUSTIN: This is Harold.

CHAIR RICHARDSON: Harold Austin is asking you a question, Jane.

MS. PARKER: Okay.

MR. AUSTIN: Jane, thank you. Thanks for your presentation and the written comments that you submitted. Just for clarification. You tried, I believe you just mentioned, that you've tried lactic acid and it does not provide the functionality that you need for your process. Was that correct?
MS. PARKER: Yes. We tried to get away from sodium lactate, we tried several times and tried several formulations, and tried to get away from sodium lactate. And just found that lactic acid on its own doesn't work. And it gives some cover, but the shelf, no it doesn't give a lot of cover because we're required the lactate part of it, which is some, you know to do the science of it. To the base part, is what does better control to act as a PH buffer.

MR. AUSTIN: Okay, thank you.

MS. PARKER: The lactic acid, does antimicrobial on its own, but is doesn't act as a PH buffer. When the PH moves up and down that's when you get a food borne illness issue.

MR. AUSTIN: Okay. Thank you.

CHAIR RICHARDSON: Great, thank you very much, Jane. And so I'm a Northumbrian, so I'm just on the other side of the border, so to speak. Except I'm in Vermont and there you are, a Scotswoman in Australia. So between us we should resolve all the problems that we have in
front of us.

MS. PARKER: That sounds really good, I would appreciate that.

CHAIR RICHARDSON: All right, great.

Thank you very much for your comments. I believe there are no further persons that wish to comment at this time. Is that correct?

DR. TUCKER: We believe that is true.

Last call for anyone signed up in advance that has not spoken yet?

(No audible response.)

DR. TUCKER: I think we are good.

CHAIR RICHARDSON: Okay, I think we're good. So I'll wish you all a good afternoon and see you next week in Vermont if you're coming.

Thank you.

DR. TUCKER: Thank you.

CHAIR RICHARDSON: Bye.

(Whereupon, the above-entitled matter went off the record at 3:24 p.m.)
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This is to certify that the foregoing transcript

In the matter of: Comment Teleconference

Before: National Organic Standards Board

Date: 10-20-15

Place: teleconference

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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The Board met in the Pinnacle Room of the Stoweflake Conference Center, Stowe, Vermont, at 9:00 a.m., Jean Richardson, Chair, presiding.

PRESENT:

JEAN RICHARDSON, Chair
TRACY FAVRE, Vice Chair
HAROLD AUSTIN, Secretary (via Skype)
CARMELA BECK
COLEHOUR BONDERA
TOM CHAPMAN
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, National Organic Program

LISA BRINES, National List Manager, National Organic Program

EMILY BROWN ROSEN, Agricultural Marketing Specialist, National Organic Program

PAUL LEWIS, Director, Standards Division, National Organic Program, USDA

SAM JONES, AMS Public Affairs Specialist

MILES MEVOY, Designated Federal Officer, Deputy Administrator, National Organic Program
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Recess
MR. MCEVOY: Okay, I think we are ready.

So, good morning. Welcome to Vermont. It is such a beautiful day out there. Yes, we are going to have a great day in here but it is a beautiful day outside. At mid-day, there is going to be a nice demonstration out in the parking lot at one o'clock. So, at least we get outside and outdoor access for a little while today.

So, looking forward to the Fall 2015 National Organic Standards Board Meeting. Lots of good discussion, good input from all the public and the public comments this afternoon and tomorrow.

So, at this point, I open the Fall 2015 National Organic Standards Board Meeting and turn it over to the Chair, Jean Richardson, to run the meeting from this point forward.

Thanks.

CHAIR RICHARDSON: Good morning, everybody. It is really great to be here. The sun
is shining, just as I planned. Today and tomorrow should be perfect. Snow isn't forecast until a little bit later. I know it is tough on some of you from out of state but I do have extra jackets, if you need any.

First, the agenda. There is a slight change to the agenda, not in content, but we are simply moving some of the material discussions that relate to annotation changes from the Crops Subcommittee and the Handling Subcommittee to be dealt with on Thursday, instead of tomorrow or Wednesday.

I'm getting an echo. Does everybody hear the echo? No, you are not getting an echo back there? Is it okay? It's okay, good.

So, those are just minor changes to the agenda, in terms of moving some of the discussion on annotations. Is there any objections to that from the NOSB board members?

Seeing no objections, we move then to the beginning of the introductions. You will notice that Zea Sonnabend is not yet here. Her
seat is up here next to Colehour Bondera. Her plane is delayed. Actually, I think it was canceled. She is stuck in Philadelphia but should be here soon.

And then in terms of one of our members, Harold Austin, as you know, fell at the NOSB meeting in La Jolla at the last meeting and is still under extremely serious healthcare, physical therapy and so forth and is unable to travel anywhere, even for just a few hours. So, unfortunately, he will have to participate by phone and by video. And we think we have the whole thing set up so that it will work all right.

And I am aware of the fact that at least one of our board members has some concerns about the process of involving a board member by virtual presence rather than actual physical presence. I know that our hearts go out to Harold as he goes through his horrendous recovery. I'm hoping to see him next April.

But I would like to ask Colehour if you would make the comment that you would like to make
in regards to participation by virtual presence.

MEMBER BONDERA: Thank you. And Harold, I hope it is more than a painful recovery; I hope it is a successful recovery.

Really, with all due respect, I really think it is important to be clear that, like Jean suggested, we are not all on the same page regarding procedure of remote participation in an NOSB meeting. Really, this is about participation, including voting and I think it is good to state this from the beginning of our time together.

Harold Austin cannot be here in person. Six years ago, I believe, NOSB member, Kevin Englebert, could not be at a meeting and he was not permitted to participate remotely.

I think change happens and we almost roll with it but with no policy in place to permit remote participation, we must work from where we are now. And for me, it is vital that we are all on the same page, we are all treated with respect and equality. We are all different, all of us around this table. We must be provided with the
neutrality that allows us to all be together so that we can work together with commonality.

And the action that is being permitted with no policy or procedure in place, even though there is draft verbiage in the PPM that is put forth, it hasn't been fully reviewed or voted on and it is not permitted in Robert's Rules.

I put it forth at the La Jolla meeting, when I called a point of order when Harold had just been injured that in Robert's Rules it says, in the Eleventh Edition on page 423 regarding voting, it is a fundamental principle of parliamentary law that the right to vote is limited to the members of an organization who are actually present at the time that the vote is taken in a regular or properly called meeting, although it should be noted that a member need not be present when the question is put. Exceptions to this rule must be expressly stated in the bylaws.

And it is my request that our Chair, and perhaps others, make a comment as to why and how it was concluded that such a choice for Harold's
participation in the meeting is logical and justified, given the efforts to be sure that said needs are a part of the public understanding and transparency and not simply facilitated in reaction to something that has come up. Remember, Organics is more than just reaction. It has to be about integrity and definition and understanding that is equal and comment and we must have common -- we must have organic policies in place that are not reactions to problems that come up and, instead, are a foundation block to be built upon. And I think, from my perspective, that is vital. So, thank you.

CHAIR RICHARDSON: The Chair's response to this is that indeed we are not actually bound by Robert's Rules of Order at this meeting. They are adopted as guidelines for the NOSB. We are, however, bound by FACA rules and FACA does not prohibit remote attendance. In fact, it allows for virtual public meetings and this is seen in many, many, I can't remember how many, but about 80 or 90 of the FACA Federal Advisory Committees.
And I believe it is my interpretation that the NOSB Policy and Procedure Manual does not preclude virtual attendance and participation. So, all we really need to do with this, and remember at the last meeting we did get advice from the Office of General Counsel, that all we need to do is to make sure that when, at the time to introduce our member, Harold Austin, in Washington, and to make sure that his comment—he can comment as appropriate meeting, ask questions as needed, and that his vote, if we do a hand vote, which we may well be doing for many of our votes, that his hand vote is also recorded. Obviously, right now, we can physically see Harold but who knows exactly how this system will work.

I know it is an unusual situation but I believe in compassion over process on something like this. And I believe it is really important that we allow every member to participate, if they can. And we all know how incredibly hard Harold works, putting in many hours a week in order to attend to all of his NOSB duties, even through the
last year since his injury.

I believe that Nick Maravell wishes to make a brief comment.

MEMBER MARAVELL: Yes, thank you, Jean.

I just would like to share my thoughts with the Board on this type of a policy. I think it is fully appropriate that if a board member makes a good faith effort to come to a meeting but cannot, for reasons beyond his or her control, as in the case of Harold, that we should accommodate that board member.

And, for example, Zea can't be here right now for reasons beyond her control. She could conference in, as well, but she is making a good faith effort to get here.

I am just a little concerned that the policy not be attendance is optional at these meetings--attendance in person is optional. I think it is important for the organic community that the members do be here, if it is at all possible for them to be here. Otherwise, I would be in my
combine seat right now, plugged in with a little earphone saying okay, let her rip because I have work to do back there. But I also have a responsibility to the organic community and I take that seriously.

So, I guess what I am saying is is there some way to accommodate that intention, if the Board were to agree? We could have a policy that this entire meeting would be a virtual meeting, et cetera. But if we establish policy, can we establish it with the understanding that attendance is not optional but, indeed, a good faith effort that needs to be made and we will accommodate conditions beyond the control of the board meeting.

CHAIR RICHARDSON: Thank you, Nick. The Policy and Procedures Subcommittee will be reviewing both this issue and also the issue of virtual webinars for public comment, when they return to their work following this meeting.

I would like to turn now to the introductions of the individual board members and
I am going to start with you, Mac, down there. If you would each just say very briefly who you are and where you are from.

MEMBER STONE: Thank you, Madam Chair. 

Mac Stone. I am a certified organic farmer in Kentucky. We have a diverse vegetable, meat, chicken, turkeys. The turkeys are beautiful this year. We hatch our own Heritage turkeys. And thankfully, we got a positive recommendation from *Cooks Illustrated* magazine last year. So, we doubled our production and they are all off and running and doing real well. So that is a lot of fun. They are a really fun creature to raise.

I represent certifiers on this Board and I want to thank the certifiers for their help in educating me and helping me understand the nuance of the rule in the work that we do. It is very different on this side of the microphone than it is on the other side of the microphone.

And lastly, I want to give a shout out to the certifiers for all the due diligence and hard work and integrity that they bring to the organic
seal.

MEMBER WALKER: I would do like Jay Freedman told me my first meeting, Madam Chair, I would like to move for enjoyment. Just kidding.

My name is Calvin Reuben Walker. I serve as the Consumer Public Interest Advocate. This is my last board meeting and I am very happy. I am 99 percent happy to be leaving. I believe that I helped make a difference. And I certainly would like to thank AMS and Miles McEvoy for selecting me as one of those bullet members. At another point in time, during a drink, I would tell you why I did not think that I would be selected. But I am definitely grateful of Miles McEvoy and AMS for selecting me. It has been a learning experience.

I represent the group public interest, consumer advocates, and I have always tried to be a little bit more pragmatic in my voting. The consumer group, as you know, is the most vocal and, to me, the most adamant group and I am proud to have said that I have served. And I have tried to serve somewhat the best that I could.
MR. MCEVOY: Thanks, Calvin, but it is not me that selected you. It was Secretary Vilsack that selected you to serve on this Board. So, thank you for your service.

MEMBER DE LIMA: Hi, I'm Lisa de Lima. I serve in the retailer's seat. This is my first year on the Board. I work at MOM's Organic Market. I have been there for the last 17 years. We are an independent retailer in Maryland and Virginia.

MEMBER BONDERA: Hello. My name is Colehour Bondera. I am here from Hawaii, where I live with my family as a farmer. I sit in a producer seat and this is my final meeting of five years.

And I think besides my jetlaggedness that I encountered from traveling here this trip, since it is my final meeting, I just want to comment that I will probably be sure during this meeting that I lay everything on the table that I want to get out there.

As a small-scale farmer, I just want to say it is not easy for small-scale producers to even
be able to be certified organic and in recognition
that most farmers in the world are small-scale
farmers. And I really want to uphold the basics
of organics, in terms of definition.

Like my mother says, and most people
know, everything is organic. So, what must happen
is upholding the integrity of the basics that have
brought us altogether here. And I think it is
critical. Aloha.

MEMBER CHAPMAN: My name is Tom
Chapman. I am a senior sourcing manager for Clif
Bar & Company and I sit here representing organic
handling companies. Before Clif Bar, I worked for
Numi Organic Tea in organic certification.

This is my first year on the NOSB and
I also chair the Handling Subcommittee.

I'm not much into genealogy but my
father is and he tells me that I'm a distant
relative to Ethan Allen. So, I consider myself at
home here in Vermont.

VICE CHAIR FAVRE: Good morning. I'm
Tracy Favre and I serve in one of the
environmentalist seats on the Board. I am currently Board Vice Chair, Chair of the Livestock and Policy Development Subcommittees and sit on the Handling Committee.

My husband and I have a small diversified farm in Granbury, Texas with pasture-raised sheep and free-range poultry, nuts and fruit orchards, bees, and a market garden.

I have a bachelor's of science in petroleum engineering from Texas A & M University but I only worked for ten months in the oil field. I spent almost 20 years as an environmental watershed engineer, working with clients on Clean Water Act compliance issues. I am a registered professional engineer in the State of Texas in civil engineering.

I have a master's of science degree in sustainable development, with emphasis in agriculture from the University of London.

I worked for four years for Holistic Management International training farmers and ranchers in sustainable land management,
eventually ending up as their Chief Operating Officer. I am currently an organic inspector, doing livestock crop and handling inspections. And additionally, I have completed IOIA training in livestock processing and HACCP.

Oh, and I almost forgot. I help my husband on his small manufacturer's rep business doing invoicing and web updates and that is in the electronics manufacturing industry. So, a lot of stuff.

Usually, I don't go into so much detail but, recently, a group published information about my background and work experience. And I can't believe that they would intentionally misrepresent or misconstrue my background, bless their hearts. I wanted to make sure that they had the full information, since they may not have done their full due diligence and I wanted to make sure that was in the public record.

MEMBER SWAFFAR: Hi, my name is Ashley Swaffar. I am the Director of Policy and Planning for Vital Farms. Vital Farms produces only
pasteurized eggs. And then I also own a small certified mixed vegetable farm in Arkansas.

MEMBER BECK: Good morning. My name is Carmela Beck. I work for Driscoll's Strawberry Associates. We are based out of Watsonville, California. I am the Organic Program Manager. I have been there for eight years.

I have spent the last eight years working with organic farmers, both small, medium, and large, to maintain and gain their organic certification. So, it is a pleasure to be with you all here today. And I sit in the producer's seat.

MEMBER TAYLOR: Good morning and welcome. My name is Jennifer Taylor and I am the granddaughter and daughter of a sharecropper.

At Florida A&M University, I developed our state-wide Small Farm Program that provides education, hands-on training, and technical assistance in the areas of sustainable development, focusing on organic production and management strategies, transitioning to organics.

I grow ecology farm systems, food
sovereignty, sustainable food system development for underserved farming populations and their communities.

As the member of the National Organic Standards Board, our role is advocate for the organic consumer, advocate for the organic communities, and public interest.

Thank you.

MEMBER MARAVELL: My name is Nick Maravell. I am a producer rep here on the Board. We started organic production in 1979, commercially, all in produce. We are in the State of Maryland and now we are crops and livestock.

MEMBER THICKE: I'm Francis Thicke. I'm from Iowa, where you can hardly swing a corn stalk without hitting somebody running for President. And I have an organic dairy farm there, grass-based and we milk about 90 cows and we process our milk all on the farm into bottled milk, yogurt, and cheese, and we sell it all locally within a five-mile radius.

And I am on one of the environmental
seats.

CHAIR RICHARDSON: Harold.

MEMBER AUSTIN: Good morning. My name is Harold. I am the Director of Orchard Administration for Zirkle Fruit Company, a fourth generation fruit business located in Selah, Washington. We grow, pack, and ship organic apples, pears, cherries, blueberries, and wine drippings.

I have been involved in agriculture for my entire life. I currently serve as the NOSB Secretary and I sit on two handling positions on the Board. I also sit on the Handling, Crops, and Materials Subcommittees, as well as the Executive Committee.

I would like to thank all of you that lended your good wishes, brought all the bags of goodies when I broke my femur during the spring meeting. You made me help to appreciate why I am here, why I am so proud of our organic family and our organic community.

Thank you all for well wishes and thank
you for allowing me to participate. Thank you.

CHAIR RICHARDSON: Thank you, Harold.
And I'm Jean Richardson. My Ph.D. is in biogeography. I have a background in the biological and earth sciences, soils, ecology, and post-doctoral training in law; professor emerita, University of Vermont, where I taught environmental studies and environmental law, and did research in dioxin contamination of milk and dairy feed on both organic and nonorganic farms as one of my pieces of research.

And then a piece of trivia about me; I was the first girl to do the weather live on evening television in Britain.

Last but not least, I would like to ask Michelle if she would please introduce herself. Are you going to do that? Okay.

MR. MCEVOY: Okay, good morning. I'm Miles McEvoy. I am the deputy Administrator of the Agricultural Marketing Services National Organic Program. I have been there for six years. It has been an amazing experience to represent and work
to protect organic integrity.

So, a little piece of trivia about myself is I also worked in the oil industry when I was a young man. I worked on offshore oil rigs off of Louisiana, just one of those itinerant jobs as I was traveling around. And after that, I worked in the orchards and reforestation, and let's see, a salmon fishery up in Alaska. So, I did that for a long time before getting my master's in entomology and coming back to Washington State and running the Washington State Department of Agriculture's Organic Certification Program for 20 years or so before coming to USDA.

So, it has been a great ride, a great time to work with organic farms and the organic industry all around the world, really. And I want to also introduce the staff from USDA that are here. So, first of all, Michelle Arsenault, who is the one that really makes this happen. She has a lot of support to make this happen but she is the one that actually does all the logistics and handles all the things that make this come
together. So, Michelle, you do an amazing job and thank you so much for making this happen.

I would also like to introduce Dr. Paul Lewis at the table back on the side here, side of the room. Dr. Paul Lewis comes from EPA. He is the new Standards Director for the National Organic Program. He has been with the program since June of this year. So, be easy on him but he is a quick learner and he is doing amazing things already. So, welcome, Paul, to the National Organic Standards Board and this meeting.

I also have Dr. Lisa Brines, who is the National List Manager. A lot of you know her and her work that she does to support the work of the Board. So, Dr. Lisa Brines.

And then we have Emily Brown Rosen here, at the front table, who is also one of the main technical support staffs that supports the subcommittees and the work of the Board.

And then somewhere in the back of the room we have Sam Jones from AMS Public Affairs. So, if any media are here, he is the one to contact.
I understand we will have some TV coverage here today at some point. So, that completes the USDA staff that are here. Thanks.

CHAIR RICHARDSON: Thank you, Miles.

And, let's see. Next I will introduce Chuck Ross.

Let me just say a few words about our wonderful Vermont Secretary of Agriculture. Chuck Ross has a BA from the University of Vermont, a great little university. I think, Lisa, isn't your degree from there, too? Yes. And an MA from the University of Washington.

And he was the State Director to Senator Leahy for 16 years. So, he really understands how the political system works in its wonderful complexity. He is an absolutely excellent Secretary of Agriculture. I have been in Vermont for 40 years and we have never had such a great Secretary of Agriculture, in large part, because he really does understand the contexts of all the interactions of agriculture from a much broader perspective than, perhaps, his usual Secretaries
of Agriculture.

So, he has a very balanced approach and he has always been very supportive of organic agriculture, local agriculture, and expanding value-added in markets, both nationally and internationally.

A trivia piece about Chuck is that he is a great ice hockey player.

So, it is with great pleasure that I would introduce you to our Secretary of Agriculture, Chuck Ross.

SECRETARY ROSS: Thanks, Jean. I love being introduced as a great ice hockey player because if it is true in your mind, then it is true in my mind. Just last night I played again, as I do, and now I get to play with my 15-year-old son and I am proud to say he aced me last night. He skated around me past the front of the net and they scored and I was playing defense. So, oh, well.

So, I feel like I have a split audience so let me just pardon myself for having my back largely turned to most of you who -- can I just see
the hand of everybody who considers yourself a
Vermont? It is interesting to know. Thank you
for being here. So, I will try to kind of address
everyone here.

Thank you for the invitation to come
speak to you and I want to thank Miles and your boss,
Tom Vilsack, and the support of the EOCA and, most
importantly, I want to also recognize an important
Vermonter, who is involved in the organic
agriculture and that is Enid Wonnacott, who has
been our voice right over here for years. I think
it is fair to say Vermont organic agriculture would
not be where it is but for Enid's long and very
important stewardship of that part of our
agriculture industry here.

But I mostly want to thank all of you
on the NOSB for coming to Vermont and bringing your
meeting here. Jean, particularly for you, I have
an idea that when you are a chair you get to have
a little influence about where some things happen.
So, that is great to have you and all of you come
to Vermont at this time of year.
And it is a wonderful time of year but I think it is also really important to recognize that coming to Vermont makes some sense. I think from the organic background, having this Board and the work you do and what you represent is so critically important. As I understand it, you get paid really big dollars for the work you do and that you put in untold hours, you do really critical thinking, and are a really important voice for a very important industry in Vermont.

Jean, thank you for the work you do as its Chair. I guess I will return the compliments, in part. Leadership is critical, I believe, in the field of agriculture but it is certainly critical on the Board. It is important to have a balanced and reasoned point of view and a welcoming of other voices and input. And I appreciate your effort to do that. I have been in public service off and on for most of my life and my father was a public servant as well. And there is nothing more refreshing than someone who is willing to listen to differing points of view in this world of
politics, of which I will suggest, given the events of today, both now and in the future, there is going to be a little bit of politics, a little divergent voices. And you know what? That is really good and I commend all of you for listening.

A couple of comments I would like to make. First of all, I think this whole organic movement, this effort, is an example of, speaking of politics, the best of citizen participation and political leadership.

We now have a $39 billion industry nationwide that has its own set of standards and these standards were not created in Washington out of thin air. These standards, and I am proud to say, reflected the input of farmers, farmers from across the country and, particularly, I might add, farmers from Vermont who were very much engaged in the beginning of establishing organic agriculture as a viable, meaningful occupation and they spoke up and they were listened to by leaders in Washington from around this country but I think it is important to note, while you are in Vermont, one
particular leaders, and that would be Senator Patrick Leahy, who I have the privilege of working for.

That voice of you, the farmers, citizens of our state and our country actually have made a huge difference. You spoke up with integrity. You spoke up with experience. You spoke up with candor and you kept at it until you were listened to and then, because you were listened to, we were able to establish a whole new wing in the agriculture production community called organic agriculture with standards that we all can understand and advance that industry.

And relatively speaking, given the history or agriculture, it is a pretty new and very important part of our economy.

And I would say that your voice and the voice of the NOSB continues to advance and promote this really important, growing industry. And when I was with Senator Leahy, he used to always kind of track the growth in billions of dollars of activity. But I think what is also important to
recognize is not only is it billions of dollars of activity in the agricultural world, it is supporting families with a sustainable living in the agriculture arena and it is responding to the consumers and their sharpening focus on what they want. They want to know where their food is produced, how it is produced, who is doing the producing and the organic community and the products you produce continue to respond to that consumer demand.

I will tell you from my standpoint as the Secretary of Agriculture from the State of Vermont, this an industry that is critically important and it is growing in importance. It is the foundation to an evolution and leadership in the State of Vermont to our community-based agriculture.

If you are not familiar with Vermont, we have for many decades been considered a dairy state. We continue to have 75 to 80 percent of our farm gate dollars coming from dairy, about 184 of which are organic dairy farms out of about 850. We
have been a dairy state but we have been diversifying our agricultural base for a long time and, particularly in the last 10 or 15 years in organic agriculture, as a critical, let me underscore critical, component of that evolution. And it has helped Vermont, in my mind, become a leader in what I call community-based agriculture, where we actually know who is doing our production. We actually are familiar with how they are producing it. We know the people. We understand the import of buying local, buying regionally, and supporting that agricultural economy, that agriculture community, that agriculture culture that is so critical to a sustainable agriculture.

And so in my view, there is much to be proud of and much to celebrate, both in Vermont and beyond because this is not just a Vermont movement, not just a Northeast movement and, as Senator Leahy used to say, we used to be thought of as just a bunch of hippies up there in the northeastern part of the country that were advancing organics. No, this is a nationwide and a global movement and you all are
to be commended for supporting it.

But I want to give you one more perspective, given my experience the last four and a half years. I have had the privilege of being the president of the national group of my colleagues called NASDA, the National Association of State Departments of Agriculture. And a couple of lessons. One, when I started, and that is all my colleagues around the country who deal with agriculture policy every day, the first thing I noticed is there wasn't much dairy represented. And the second thing I noticed is there wasn't any organic represented at that national meetings. A lot of policy conversations. We would have the Tom Vilsack types come the meetings from all walks of agricultural life but not once did I see somebody from the organic community show up among me and my colleagues, whose responsibility it is to advance agriculture policy across the country.

And when I was President, I had the job of hosting a meeting like Jean has to today and I used to promote our organization to help raise some
money to support it and saying my colleagues are important because if you are going to advance agriculture policy in the United States, well, where do you go? Congress, right? Well, you tell me how much Congress is getting done these days.

Well, then if you don't get it done in Congress, where do you go? You might go to your governors but the governors typically have a wide variety of things they need to think about in advance. And so, consequently, agriculture policy oftentimes falls to people like myself who are dealing with it on a day-to-day basis and move it through the system.

And what I was seeing when I was making that pitch was I wasn't seeing organic agriculture. But one of the things I am most proud of is I actually reached out to the organic community and the sustainable ag community and they came onboard. The Organic Trade Association is now involved with the National Association of State Departments of Agriculture. Your voice is being heard in a way that it hasn't been heard before and I urge you,
I urge you to stay engaged because me and my colleagues do make decisions. We have influence and we shape the policy framework.

I am going to be out of a job in about 16 months because my governor is not running again. So, I have to figure out where I am going to go next. But one of the things I want to leave is a legacy that the organic community be involved in the national conversation about agriculture policy and its future. And you have not been in the way you should be and you are now. So, stay engaged.

Last point and this is more of a warning. And that is, as we move forward in the agriculture conversation and, particularly, in the organic conversation, let us continue to be thoughtful. Let us continue to be reasoned and pursue our ag and food futures in that way. Let's honor the need to have a healthy planet, have healthy consumers, and a healthy industry. And, this is the point, let us also honor our diversity, both within the agriculture community, of which I think we are going to hear differing points of view.
today, and within agriculture as a whole.

I will tell you, from my perspective as being a President of the National Association and dealing at that level, it is so easy to find ourselves focused on the things that divide us at the expense of all the things that unite us. The issues of food and agriculture are too big, too profound to our future, to spend all our time, all our energy, all our political effort and will fighting over the things that divide us.

There is too much to be gained, too much to be learned from one another, whether it be within the organic community or within the agriculture community at large, to ignore and miss those learning opportunities to advance agriculture and food at the speed and at the rate and in the way that it needs to be. I am a firm believer that we have a bright future ahead of us in agriculture. It is not only bright but it is necessary. An organic community needs to be a big part of that. We have much, much to learn, and much, much to do in the years ahead.
So, that would be my warning, given my experience, involved in the politics of agriculture. We have too much that unites us.

So, now I think I am supposed to done one other thing.

CHAIR RICHARDSON: Yes and before you introduce Senator Leahy via the video, I would like to acknowledge the presence of Tom Berry over here. Tom is in the State Director -- or is that correct -- for Senator Leahy here in the State of Vermont. And if you have questions or comments you want to put to him, he will be here for a while this morning.

Do you want to say anything, Tom?

Great. Thank you, Tom.

So, Chuck, would you like to introduce the Senator, the virtual presence of the Senator?

SECRETARY ROSS: I would be happy to, Jean, and thank you. The fact that you are here in Vermont and that you have a U.S. Senator who has taken the time to cut a video, as some as a former staff person for a senator, that is no small potatoes. I will tell you people like Tom and
Adrienne Wojciechowski who he works with in Washington, D.C., they take time to make sure these things happen. They brief the senator. He, frankly, doesn't need, and I will tell you this from experience, a whole lot of briefing when it comes to organic agriculture because he actually pays attention to this.

And the fact that he wants you to have a video of what he has to say is significant.

For those of you who don't know the senator, he has a great staff, Tom Berry being one of them, who has been with the senator for a number of years. He has other staff, both in Vermont and Washington, D.C., who actually really care about what happens to agriculture and organic agriculture in Vermont and beyond.

He has been and continues to be a guardian of the first amendment. He is championed as that man who advances all our voices. He is, without a doubt, considered an environmental senator and that ranges from his deep concerns about Lake Champlain to concerns about the Amazon.
and climate change that is occurring around this world. He is an international voice of peace and reason and he is a long-term voice for agriculture in the United States. He has been in the senate since 1974, the longest serving member to serve the state of Vermont and all those years he has been on the Agriculture Committee. And so it is no surprise that it was he to whom the organic community turned when they needed to advance national organic standards, of which he is considered the father.

And with that introduction, I would ask you to just give the senator a few minutes as he addresses you via video. And I thank you, myself, for being here and giving me an opportunity to say a few remarks.

SENATOR LEAHY: What a treat, and especially in Vermont in the fall, to welcome you all from across the country and from the Green Mountain State to the National Organic Standards Board Fall Meeting. I appreciate you brought your 2015 meeting to Stowe and to what I think is one
of the prettiest settings in our state.

I especially wanted to recognize NOSB Chairwoman, Jean Richardson. I have known Dr. Richardson's exceptional contributions as a professor, a scientist, a researcher, environmental advocate, and community leader for many years and is a very close of both mine and Marcelle's. I knew that well before I nominated her to serve on the NOSB. So, I really wasn't surprised to see Jean take on the leadership position at a time of considerable challenge for your Board and to see her turn away attempts to dilute the meeting of the organic seal.

As her term as Chair draws to a close with this meeting, please, all of you, join me in thanking Jean for strong, open, and thoughtful leadership. Heck, let's all clap for her.

And this year, we are celebrating the Silver Anniversary of the Organic Foods Production Act. Twenty-five years ago, when I was the new chairman of the Senate Agriculture Committee, I included this charter for the National Organic
Standards and Labeling Program. I put in the 1990 Farm Bill. And I brought the Agriculture Committee to Montpelier, my birthplace.

At that time, the term organic meant whatever you wanted it to mean. It told consumers nothing about the products. And many in the Senate, back then, dismissed organics as a small niche activity. They thought it was just a hobby of a bunch of crunchy fringe-types up there in northern New England. It's never going to amount to much or have any impact within American agriculture.

Well, the verdict seems to be in on that question today. Organic product sales in the United States are now valued at $39 billion a year. They posted double digit growth year after year, after year.

But give me a moment of native Vermonter's pride to note that Vermont leads the way with the greatest number of organic farms per capita in the United States. So, the entire organic industry and the livelihoods of thousands
of Americans, many of them in Vermont, are based entirely upon consumers' trust that the organic seal has real meaning.

Many of us in this room fought hard in the beginning of the organic program to make sure that happened. And trust in the organic seal has brought us far over the past 25 years and the work of the National Organic Standards Board is essential to keep that promise.

In the United States and around the world, particularly here in Vermont, consumers are demanding to know what is in their food and they want to know how it is produced. And policymakers and producers are responding with a proliferation and formal label that says it is GMO-free, or contains GMOs, or cage-free, or all natural, hormone-free, and many more but only the organic label is built on a foundation of federal law and carefully considered rules and guidance all grounded by 25 years of experience and an independent Board that hears the input of producers and consumers and processors alike.
So, over the next four days, you are going to hear from some of the most dedicated and experienced organic producers in the world, including many here in Vermont who have advised me for years. And I know you will listen closely to this testimony input, as you and all of us continue to fight to protect the integrity of the organic label. I know how important your work is to the organic sector. We all do. So, have a great meeting and welcome to Vermont.

CHAIR RICHARDSON: Thank you very much and thank you, Chuck; thank you, Tom, for being here.

We will next take the formal Secretary's report. And Harold Austin is the Secretary of the NOSB and we would request that he present the acceptance of the 2015 meeting summary of April 2015.

Harold.

MEMBER AUSTIN: Thank you Madam Chair. At this time, I would like to address the members of the National Organic Standards Board. If there
are any additions or questions -- for the April 2015 meeting held in La Jolla -- for the full summary and voting of the members of the --

Hearing, none, I would move that we accept these as the official record of the Spring 2015 Meeting of the National Organic Standards Board of the La Jolla meeting.

Madam Chair, that ends the Secretary's report.

CHAIR RICHARDSON: Thank you, Harold. The wording was not entirely clear for us. It is skipping every sort of almost alternative phrase. So, basically it is simply the pro forma presentation of the request to accept the 2015 meeting summary has now become the official record of the April 2015 meeting.

Thank you, Mr. Secretary.

The next item in our agenda is a presentation by the National Organic Program. It is a report and update since our last meeting. And I would ask Miles McEvoy, Deputy Administration of the National Organic Program, to present his report
to us. Thank you.

MR. MCEVOY: Okay, thanks, Jean. As I said, it is nice to be here in Vermont. I have a number of things to report about activities at AMS National Organic Program.

Okay, so I am going to cover a number of things today. I am going to talk about the Agricultural Marketing Services National Organic Programs strategic plan. I presented this at the spring meeting. So, it is an update about that strategic plan and some of the activities that we are conducting under the auspices of the goals of the strategic plan.

I am going to get into a little more detail about perfecting organic integrity, some of the things that we are doing specifically in the compliance and enforcement division, then move on to some topics that are more particular to the National Organic Standards Board, then an update on the organic integrity database and, finally, some of the sound and sensible certification projects that we have been conducting.
First, just a quick overview of some of the accomplishments over the last number of years. There have been many. Former Deputy Secretary Merrigan started what is called the age of enforcement in 2009, which outlined the principles of appropriate penalties for violations of organic standards now, for the National Organic Program issuing civil penalties and using our new subpoena authority that we got under the 2014 Farm Bill. It is fairly routine for the Compliance and Enforcement Division.

The Pasture Rule has been a very important milestone for the National Organic Program. It was finalized in 2010 and implemented over the next couple of years and it ensures that all organic ruminant operations are pasture-based operations. Residue testing is now an integral part of the certification process and that helps to protect organic integrity. The NOP Handbook provides guidance and instructions to organic operations and certifying agents. It helps provide consistency in how the rules are
interpreted and enforced. And many of those instructions and guidances and policy memos that are in the handbook are directly from the recommendations from National Organic Standards Board.

We have also increased audit consistency with the 80 accredited certifiers that operate around the world. Audits are now regularly conducted and include a number of new tools, including review audits, compliance audits and other tools that ensure consistency in alignment of those certifiers with the accreditation and standards requirements.

We have had four audits conducted by the Office of Inspector General. All those audits led to findings that have helped strengthen NOP performance.

In terms of international equivalency arrangements, we have negotiated and implemented equivalency arrangements with five countries and provided a common market for organic products while ensuring protection of organic standards. So, this
is quite a feat now that the two largest markets, the European Union and the U.S. have basically a common way of trading organic products. It really makes a big difference for organic producers and handlers around the world to access those markets.

We have made significant improvements to the appeals process, reduced the appeals time from two years to about six months.

We have launched the USDA Organic Literacy Initiative and trained tens of thousands of USDA employees around the U.S. and also around the globe. So, those employees or those staff at USDA now have basic understanding of organic standards, of the certification requirements, and that pays a lot of dividends for the agricultural community.

We have implemented an effective communication tool, the USDA Organic Insider so we can communicate about USDA activities that support the organic sector. We created a list of certified operations and made improvements to the data quality every year. And we have implemented the
sound and certification concept to ensure that certification protects organic integrity but does that in a manner that is reasonable, that is accessible, obtainable, and affordable by farmers and handlers. Still a lot more work needs to be done in that area but a lot of good work has already been accomplished.

So, the NOP strategic plan has five main goals. First and foremost is protecting organic integrity. That is the main business of the National Organic Program and guides everything that we do.

Secondly, market access, and when we talk about market access, that is not only about international market access, that is about access to local and regional markets ensuring that farmers and handlers have the information they need and the resources they need to be successful in getting into the organic market.

Clear standards, third goal, there is still a lot of work that is needed in this area. There are a number of NOSB recommendations that
need to be fully implemented. We have made a lot of progress on clear standards but we still need to complete rulemaking on origin of livestock, animal welfare, aquaculture, apiculture, pet food, mushrooms and there is probably a few more that we will find after we finish those.

Utilizing technology to advance organic integrity. Right now the focus of this particular goal is to modernize database but we want to ensure that we appropriately utilize technology to protect organic integrity.

And finally, organizational development. The NOP staff has grown to almost staff members. We need to ensure that they have the training and support that they need, provide the quality services to the organic sector. We also need to continually improve our processes within the program to effectively and efficiently serve the organic community.

So, I want to get into a little more detail around protecting organic integrity. Let me get all the numbers up.
Okay, so here we have a comprehensive overview of the ten key concepts that together help to protect organic integrity. So, certification is certainly the core business process around protecting organic integrity but there is a number of other elements as well that are very important.

So, first, clear and enforceable standards. Farmers and handlers need to understand the standards. If they can understand what the requirements are, they are much more able to comply with those requirements. And then they also need to be enforceable. So, for certifiers, in particular, the standards need to be written in a way that they are enforceable. We do have some work to do in that area and in certain aspects of the regulations that really need to be clarified and crystalized, so that they are clear of what are the enforceable parts of the standard.

Second, we need to have an effective communication system so people know what the standards are or changes to the standards. So the USDA Organic Insider is part of that communication
network.

Third, transparency in regards to process and changes to process. So, the NOSB provides transparency in the work that they do through their subcommittees, the notes from their subcommittees, the proposals that they have out for public comment, the public comments that they receive. AMS, in our work, we provide further transparency when we send out information and ask for public comments on draft guidance and proposed rules. A very important part of the process.

Fourth, certification, it is the heart and soul of the verification system. We need to ensure that the certification system is thorough and that there are quality inspectors and reviewers that are conducting the work of certification, that they have the tools and the resources they need to do effective certification work.

Fifth, an accessible and effective complaint process. We want to really get the word out that we have a complaint process and make sure that that is an effective complaint process.
Sixth, appropriate penalties for violations of the standards. So, they vary, depending upon the type of violation, from a corrective action to civil penalties, to criminal penalties for criminal violation. So, an effective penalty structure is important.

Seventh, market surveillance, this is one area that needs more attention. I would like to see a more effective way that labels and products that are sold in the marketplace could be reviewed to ensure certification and compliance with the organic standards. So, this would be part of a comprehensive system to protect organic integrity but we have more work to do in really creating a more effective market surveillance part of the program.

Eighth, unannounced inspections. This compliments the certification process. It keeps everyone on their toes and now is a regular part of the process that certifiers conduct, that they conduct unannounced inspections to help protect organic integrity.
Ninth is residue testing. We have learned a lot in the last few years. Now that it is a regular requirement of the certification work, we have found residues that have led to enforcement actions or improvements to buffer zones or handling procedures. So, it is a very important component of protecting organic integrity.

And finally, continuous improvement, always looking for ways to make the system better, more fool-proof to ensure that organic products really are organic.

So we have a very effective complaint process and this is the form that we have on our website that illustrates the kind of information that we like to receive or want to receive to have that complaint process be effective. The information about how to file a complaint is on our website. Anyone can file a complaint at NOPCompliance@usda.gov. We provide guidance on what helps our compliance work. We need to receive as much as information as possible about the alleged violation, what type of product or
operation, when and where was the product purchased or the violation observed, copies of labels or product lot numbers can also be very helpful.

All complainants are anonymous. So, that is one thing to let people know that anyone that files a complaint, that is not disclosed under FOIA requests. So, keep that in mind if you are interested in filing a complaint.

So all complaints are reviewed and evaluated. There is a process that we go through. When a complaint comes in, we first determine if it is within our jurisdiction. Our authority is under the Organic Foods Production Act. Complaints about food safety or labor laws or other violations that don't have to do with an organic claim, we would refer them to the appropriate authority.

We also get complaints that may be about the organic standards themselves. So, that is very important information but it may not be a complaint that we investigate. For instance, we may receive a complaint that carrageenan is in an
organic food product. In those cases, we would explain that carrageenan is on the National List and we would provide information to that person on potentially how to file a petition for removal of carrageenan from the National List or how to stay informed about standards and the National Organic Standards Board process, how they can get involved in the process.

We also review complaints to see whether there is adequate evidence for additional investigation. If the complainant does not know when or where the product was purchased, then we may not have sufficient evidence to launch an investigation.

In other cases, the evidence provided shows compliance with the regulations. For instance, the label is compliant. So, there is a complaint but we look at the label and the label is actually a complaint label. Or the photos shows animals on pasture; in those situations, we may also check with the certifier, at this stage, to determine whether the operations are in good
standing.

If we do have sufficient evidence of violations, then we investigate further. If the operation is in the State of California, then the case would be referred to the California State Organic Program, where they would do the additional review and investigation.

If the case is about a certified operation, then it is referred to certifiers. Certifiers then have to report back to the NOP on the results of their investigation.

In the case of uncertified operations, and this what accounts for the majority of our complaints at this point, over 70 percent of our complaints are about uncertified operations, then the NOP Compliance and Enforcement Division conducts the investigation.

So, I wanted to give some examples of some of the enforcement actions that we have taken over the last year. First, is a case where we prevailed in a formal administrative complaint against Ernest Miller of Stony-M Farm. This was
a case involving the use of a prohibited substance. The farmer claimed that the substance should be allowed and that it was only a minor ingredient in a fertilizer mix. The certifier did their work, in terms of issuing a notice of non-compliance and then, later, a notice of proposed suspension, which the farmer appealed.

At that point, when there is an appeal, we take a look at the appeal and we then eventually issued an administrator's decision, which denied that appeal. At that point, the operation still has additional appeal rights. So, they requested a hearing in front of an administrative law judge. And for us to move forward with that, we have to file a complaint.

So, we filed a complaint and we held that hearing in front of the administrative law judge and prevailed with a three-year suspension of the land where the substance was applied.

The second case was with the Organic Food Chain, which is a formally accredited certifier who operated in Australia. The NOP's
position was that this certifier willfully violated the regulations for failure to meet accreditation requirements. We issued a notice of proposed revocation and they appealed.

Then AMS issued an administrator's decision to deny that appeal. They then requested an administrative hearing. We then filed a complaint, which led to a consent decision and order. So, in this case, we did not go to the administrative hearing or to the administrative law judge. We settled this matter with a consent decision and order, where they agreed to be suspended for two years, rather than go to the hearing. So, at this point, this certifier is suspended and in order for them to get reinstated, they would have to demonstrate full compliance in order to reinstate their accreditation after the two-year suspension.

Another example where we have had a lot of success around compliance is with the help of the National Organic Program Handbook. A few years ago, we published the instruction food needs
to be certified in order to clarify the operations that needed to be independently certified. Prior to this publication, some certifiers were allowing operations to be covered by other certification. These operations were inspected but they weren't independently certified. So, this instruction clarified that operations that produce or handle organic food products need to be independently certified.

So after publication, we received a number of complaints about auction barns that were not certified, uncertified operations. We conducted investigations and the result of that is six of those operations obtained certification and are continuing to handle organic livestock and the other operations have stopped handling organic livestock. So, they are all in compliance and part of the outcome is that six of those operations are now certified organic livestock auction barns.

In regards to serious violations, we often work with other regulatory authorities. One example was an uncertified operation that was
making organic claims in Alabama. We initiated an investigation in 2013 and then we worked with the State of Alabama's Attorney General's Office in support of their investigation of securities fraud. Was the result was that last year the owner accepted a plea bargain from Alabama that included a 15-year prison term and fines. Not all because of organic fraud but the organic violations that we investigated and provided to the State of Alabama supported this case.

In summary, the Compliance and Enforcement Division received 549 complaints last year and completed review and investigations or enforcement actions on 390 cases. So, the number of complaints that we are receiving are increasing quite significantly. When I started in 2009, we had less than 200 complaints that we were receiving every year. So, we are getting significantly more complaints that are coming in. We think that is a very good thing. That means that we are getting the word out to people that we have an effective complaint process and this helps us to take the
actions to bring more consistency and integrity to the organic system.

Also keep in mind that part of compliance and enforcement's mission is to both enforce the standards, as well as protect compliant operations. Some complaints are filed for malicious reasons. Some complaints are against competitors, so there is no real basis for it but they are in a dispute. Some are filed because of domestic disputes or even to discriminate against certain types of farmers or operations. It is as important to clear a case and close it with no findings as to find violations and take appropriate enforcement action.

When violations do occur, we have a number of tools that we utilize. Last year we issued 36 cease and desist orders and issued 121 notices of warning. We also issued eight civil penalties and fines that totaled almost $2 million.

So, a lot of great work is being done by the compliance and enforcement division and I think it is important for people to know that.
Okay, so let's now turn to the National Organic Standards Board activities. As you know, the National Organic Standards Board is a Federal Advisory Committee which assists and advises USDA. NOSB provides very critical and important recommendations that help the Agricultural Marketing Service develop, interpret, and implement the National Organic Program. The NOSB has a charter, which will be renewed next year. The charter has to be renewed every two years. It spells out the mission and duties of the Board. The National Organic Standards Board has a designated federal officer, who is the Program Manager of the National Organic Program, meaning myself, the Deputy Administrator of the NOP. There are certain responsibilities that the DFO has in terms of opening and closing the meeting.

The NOSB has subcommittees that do a lot of the work that has been presented to the full board at these meetings and a chair of the board. And as a FACA, as a Federal Advisory Committee, the NOSB must have opportunity for public comment.
There are 15 members of the Board that are appointed by Secretary of Agriculture to five-year terms. There are 14 at this meeting because we had one resignation over the summer, Paula Daniels. So, there will be six new appointees for the 2016 session.

Nominations for the last open position, the Environmental Protection and Resource Conservation position will close this Thursday. So, please apply and encourage others to apply. I know there is a lot of great people here in this room that really, at some point, you should be sitting up here. So, please apply to be on the National Organic Standards Board. The more applications we receive, the better.

So, this is just a little bit of statistics on what has been happening with the NOSB recommendation. So, the NOSB has made numerous recommendations. By our count, there has been 174 practice standards recommendations over the last 20 years, for which AMS has addressed around 150 of them. There are a number of outstanding ones
that include a number on aquiculture, on pet food, on apiculture, on mushrooms. There is multiple recommendations on animal welfare. So, this is one area that AMS, the National Organic Program, still has a significant amount of work to do.

The one thing about the recommendations that is a little hard to compare is some of the earlier recommendations had lots of topics that were in the same recommendation. But the Board as a whole, 174 recommendations, of which about 150 have been addressed by AMS.

In regards to the National List, 101 recommendations, 89 of those have been addressed. There are some outstanding recommendations but most of those are recent or are in process. There are a few old National List recommendations on livestock materials that we are in the process of putting together a proposed rule on those. So that should be coming out next year.

In terms of sunset, 129 reviews have been completed. So that looks a little odd, since there are over 200 materials on the National List
of why there is only 129 reviews. But what you have
to keep in mind is that the previous sunset review
processes bundled substances into one review
recommendation. So, one recommendation may have
represented 50 different substances under previous
boards.

And we do have one outstanding
substance review substance that we have not
addressed and that is sodium nitrate, which is
still an outstanding item that the program needs
to resolve. I'm sure Zea would be happy to hear
that.

Okay, moving on to hydroponics. I know
the National Organic Coalition had a good
conversation about this yesterday but I just wanted
to talk a little bit about the progress that we have
made on the Task Force.

Just a little history, in 1995 the NOSB
recommended that hydroponic production in soilless
media to be labeled organically produced shall be
allowed of all provisions of the organic food
production act have been met.
In 2004 they basically said the same thing. They reiterated that recommendation that soilless media to be labeled organically produced shall be allowed if all provisions of the OFPA have been met.

In 2005, the National Organic Program confirmed that hydroponic operations may be certified organic if produced in compliance with the regulations.

So, over this time frame, there has been a couple of dozen operations that have gotten certified using the current regulations and are certified by a number of different certifying agencies.

In 2010, the NOSB Greenhouse recommendation, the NOSB recommended that USDA shouldn't allow organic crops to be produced using organic methods -- using hydroponic methods. Thank you, Jean.

So, we have different recommendations over time, which in and of itself when it would not necessarily be enough to stop us from moving
forward but within that recommendation of prohibiting hydroponics, it doesn't really clearly clarify what is hydroponics and what isn't because there is a continuum of different types of operations that are field-based, soil-based operations to more container systems that are using potting soil to semi-hydroponic systems that are using some kind of growing matrix with a water bath.

So for us to move forward with any kind of rulemaking or guidance on this would be very challenging without more information about what is really the intent of the National Organic Standards Board. So, therefore, we have created a Task Force to ask the NOSB to provide us with further clarification about hydroponics, organic hydroponics. And we established this Task Force to report on the compatibility of these systems with the regulations and the Organic Foods Production Act. That Task Force will provide a report to the NOSB and that will be on current hydroponic and aquaponic production methods used in organic production and whether these practices
align with OFPA and the USDA organic regulations.

We imagine that the report will include a diversity of perspectives of those that think it does and those that don't. And that will be in the report to the NOSB and then NOSB will do their deliberations to determine further recommendations on hydroponics.

So, the Task Force has been appointed. They will have their first conference calls within the next few weeks. They will have a face-to-face meeting this winter. We hope to have their final report submitted to the Board sometime over the summer so that there can be a proposal in front of the Board for the Fall 2016 meeting.

The NOSB liaisons on the Task Force are Jean Richardson and Zea Sonnabend and then the members are a diversity of both soil-based and hydroponic growers and academics and certifiers from around the country. So, we look forward to the work of this Task Force as we work to get more information on this topic.

Moving on to the Organic Integrity
Database. This has been a very successful project. If you are familiar with IT projects, a lot of times they don't go so well and they are not delivered on time but this one was. The first version of the integrity database was launched at the end of September. The goal of the project is to develop a modernized database that contains up-to-date and accurate information, increases supply chain transparency, and promotes market visibility for organic operations.

Certifiers and other data users have been involved in creating the database and supporting the development of it, participating in a user group. There are over 31,000 operations that are listed in the database, with over 175,000 products. So, it is a large amount of data that is covered under this database.

The capabilities of the new database include certifier user accounts. This will allow the certifier to upload data, new data fields which will allow better research to support compliance, a new scope and product taxonomy. And once
everyone is using this, this will help to provide a more consistent view of the taxonomy of organic products, more structure, and search and higher data quality. Certifiers will be able to upload data in both Excel or hand enter the data online.

There is a new user interface. So, if you go to the website, there is a new look and feel to the database. It is much more accessible information. In the next month, certifiers will be able to log in and submit updates directly and it also has public search and report functions as well.

This you can't see very well but this is basically the new template that certifiers already have. It has a core of required information and a range of optional data fields that will be used to support future capabilities of this database. The new template allows certifiers to build a data export tool and provide data to the NOP often so that the data will be much, much more current, rather than the one time data that we have had in previous years.
In terms of the taxonomy of how you find things, the first level is crops -- or the scope. So, there will be crops, livestock, wild crops, and handling at the current time. And then categories within the crops scope. There will be various category names, then items names, and then more and more specific information as you go down through the taxonomy. Multiple levels with flexible options for engaging.

We have used both top-down and bottom-up approaches. So we consulted with other data creators. The national agricultural statistic service with the EU, with the organic trade association, with global gap, and with retailer standards to build this flexible taxonomy.

There is also a bottom-up way that this has created as well. We mined the 2014 certified operations and the props and the products that were listed. There were over 40,000 unique items that were listed. Many misspellings, many different ways of spelling the same product. The same item
was listed hundreds of times with small variations of wording. So, over time, this is a very important part of this database to stabilize and standardize the names that we use for the products that are in better certified organic.

An example of one of the products listed was grape chicken apples, for instance. So, the database will help to eliminate those types of products. I don't know what a grape chicken apple is but I guess it is organic.

So, this is a view of what the database now looks like on the website. Access to the new system at the same link. You can get to the list of certified operations. You go to the AMS home page under directories in the bottom left. The currently posted data is 2014 data still. This is the data that we received from certifiers at the beginning of 2015, which is basically their 2014 data. But over the next few months, we will be receiving the new information from the certifiers and then they will continually update that information over the course of the year so the data
will be much more current as we move forward into
the future.

So that is Phase 1 of the database. We
have Version 2 and Version 3 will be released later
this year and some of the things that will be in
the database, advanced search enhancements,
automated connections for the certifiers to
provide their data.

There will be certifier profiles
available through the database, a history of the
operation, in terms of when they were certified,
whether they were suspended or reinstated.
Adverse action documentation will be part of the
database and then, at the end of the year, we are
hoping to have a certificate. So, a federated or
federalized certificate. Right now, there is 80
different organic certificates that are being
used. It is very difficult for compliance to have
all these different ways that certificates are --
different information on different certificates
from different certifiers. So, the concept is to
have one USDA certificate that certifiers can
utilize.

I know all the certifiers are not really thrilled by this idea but, in terms of transparency and compliance and trade, having one type of certificate with the same type of information, I think, is very important.

Okay, moving on to sound and sensible. Sound and sensible is a concept to ensure the integrity of organic food products with the sound part of that phrase, but doing it in a sensible way, so that we are reasonable in terms of the requirements that we require of organic producers and handlers so that they can be successful, so we don't request ridiculous amounts of paperwork. We only request what is necessary to protect organic integrity.

So, in 2014, AMS funded 14 projects that support this concept of accessible, attainable, and affordable organic certification. The projects have already helped over 200 farms and businesses learn about the path to organic certification. We have many educational
resources that have been created through these projects, videos, tip sheets, and workshop materials that now enable us to reach thousands of new farms and businesses.

So, these 14 projects were awarded to 13 different organizations. They covered the breadth of the United States. All areas of the United States have projects that were undertaken. And then if you look at that pie chart on the lower left, you will see that they also covered a variety of different areas. So, certification, about a third of the projects covered technical assistance around certification but also things around standards and implementation on the inspection process, on helping about record keeping and organic system plans, a lot of really good content has been created. So, 75 tip sheets or fact sheets, 16 trainings, and 15 information videos. Now, the results of these projects are going to be rolled over the next couple of months. And NOFA-Vermont was one of the contractors that created some of this work. They created five
videos that communicate the organic value proposition. And if everything works right, we will play one of the videos that NOFA-Vermont did.

VIDEO: Certified organic means that we are following a set of guidelines that the USDA has set up. We are producing food in a sustainable manner and that means how we grow the food and all, how we take care of the land. Are we considering biodiversity? Are we using pesticides? Are we using herbicides? All those kind of things all go into it.

Organic certification offers a place for people to start asking questions. What does organic mean? What is it that you do? What are your farming practices? You know it is an opportunity for us to tell consumers that it is a whole farming practice.

One of the advantages of being certified, of course, access to markets is why certification was invented and it is critical and being able to differentiate yourself within those markets from somebody who is not organic. Most of
our crop is wholesale to supermarkets. It is absolutely required that we be certified organic with the USDA.

There is a big drive to get a lot of people into organic dairy and I think it worked really well. A lot of people who were essentially grass-based made the transition because it was easy and the pay price, although it wasn't as much higher than conventional as the pay price is now. It was stable compared to when my father milked cows; it would drop and go up. You never knew what you were going to get paid.

You know there is this very solid foundation that we stand on when we say we are certified organic. We are following a certain set of practices. Anyone could go look up what that means, exactly. So, it just feels like this very sort of open and accountable system that boost customers' confidence in us as growers.

I mean if everyone is coming to my farm and buying milk out of my bulk tank and they want to know what I do, they ask me the questions. But
if you are selling milk in a glass bottle, that organic certification just means that the people know that some third party is checking to make sure I did the things that I said I did.

There is certainly a lot of benefits, other than financial. A lot of times we will dive right into the financial ones because that is going to be a primary motivation for farmers to go organic but there are many other benefits of organic management and organic certification, including consumer trust in the organic seal and environmental benefits, benefits in livestock health, in soil health, and quality of the food.

If you are only going into something because you will get more profit, it makes it a little harder to see the possibilities of bringing more fertility onto your land and doing things in a way that doesn't look as profitable initially but, in the long-term, will bring you more fertility and better profits.

I think people are intimidated by the price of the certification, which is certainly a
consideration. But at the moment, it is 75 percent reimbursed through a government program.

It is a pretty extensive application process. It has gone online, which is a big help because our records is now kept from year to year and we just have to update it.

The inspector calls, makes an appointment and so, at that point, we just make sure we have everything together. And we are keeping track of all of our input. So, anything we have added to the soil in terms of amendments, fertilizer, anything we have used to control insects or pests, or diseases, we are keeping record of the timing of any of those applications.

We walk pretty much every inch of our fields. We walk to every boundary, especially at this farm. We are bordered by two conventional corn farms, the railroad tracks where they spray herbicides on an annual basis. And so we have to measure and make sure that all of our growing areas are a certain distance away from those areas, just so it is considered clean and safe.
I think it makes us a better farmer. The documentation and the record keeping that we do, I definitely wouldn't have done it, had I not been required by organic certification to do it. You know I might have thought in my mind, oh, yes, I should write that down but it would look something funny because I don't have to show it to somebody else. It would look like something that got laundered or whatever. But now we have about six notebooks that we maintain and add to.

Running a business, there are disciplines that are required for it to succeed and I think record keeping is one of them. And so if somebody is completely adverse to doing the numbers, I would suggest that they become a poet and not a farmer.

The sorts of records that farmers need to have ready for their inspection are all aspects of the farm, everything that gets put on the crops, all of the harvests of the crops, and all of the feed and medications that get used on the livestock and, really, a description of the management system
of the farm.

Record keeping is vitally important. I mean if something happens or you do something, you have got to write it down. Above that is observation. Like you have got to pay attention to all the different aspects of your farm and to learn from that.

The best thing about certification is the community of which we are a part. And it is going to meetings, hanging out with all your friends, commiserating about when the weather is bad and patting each other on the back when the weather is good. So, we are part of a greater community that is trying to do good in the world.

MR. MCEVOY: Okay. So, really excellent work has been done by a number of different organizations. I think some of these videos will be highlighted at the reception on Tuesday night. But just think that this has happened throughout the country. There is going to be lots of really great resources that are going to help organic farmers and the organic sector to
continue to thrive and to grow.

So, thank you. That concludes my report.

CHAIR RICHARDSON: Thank you, Miles. Are there any questions that the board members would like to ask of Miles, at this point, before we go to the next item? I'm not seeing any.

Very well, we will turn now to my very brief report of the Chair of the NOSB. Since this is my home state, I will start with just a little brief background.

So, welcome to Vermont. Despite my funny accent, I have lived here for 40 years. In 1976, my first husband and I started a mixed livestock farm in Fairfield, northern Vermont, where grass was about the best thing that grew there. We started from scratch. We had no barns, no house. We lived in a tent with our kids in a lean-to that I cooked on with a wood stove and I persuaded the telephone company to put the telephone on a sugar maple tree, since this was before all these phones we have now. And that is
where my two daughters grew up, Sarah Flack, a superbly knowledgeable organic specialist that most of you know. And Gwyneth Flack, my other daughter, with her husband, they now produce certified organic maple syrup, buck mountain maple. And today, the Flack Family Farm is well-known. It is organic certified of course, and especially well-known for its excellent sauerkraut and creamed cheese. So, we are a very organic family for a very long time.

Now some response to some of the oral and written comments that we have received over the last few months. And at the last meeting, we very clearly heard a demand for more time and more mechanisms for public comment. And so we piloted those two webinars that many of you took part in as a webinar style for getting some extra public comment in. And these, of course, are incorporated as part of this meeting and all of the materials from those webinars will, of course, be available as soon as they can get transcribed.

Each session was attended by about 80
people and there were 17 commenters on the first call and 18 on the second, including one person calling in from Australia, which I was pretty impressed at since she had to be there at like 5:00 in the morning.

We had a lot of people contact us and say they were really delighted that we have this additional way to provide public comment because they couldn't afford or didn't wish to come an in-face meeting but needed to continue to work on the farm.

For this meeting in Stowe, 110 people have signed up for oral comment and so, if you add that in to the webinar, that will be a total of 145 oral commenters spread out between the three hours of the webinar time and almost eight hours of this meeting. So, that is a total of 14 hours now provided for public comment. So, that is really pretty darned impressive improvement. I am very pleased about it.

Michelle keeps data on who comes to the meetings and how many people and she tells me that,
on average, we have had between 74 and 90 oral
commenters, typically over a period eight hours at
our in-face meetings. And in La Jolla, the first
of the Sunset 17 comments, we actually had 124
commenters and over ten hours actually at the
meeting.

So, with this meeting here in Stowe, we are already well ahead of the game and I think
that is great.

Oral comment, we have been having that
at five minutes on the webinar. This is to, of
course, to entice people to sign on. But time at
this meeting is only three minutes. So just
remember that the next time we have a webinar, that
you will have time for more of it, hopefully on the
webinars. And of course, three minutes at this
meeting because we have to also finish the review
of 200 materials.

So, despite some of the comments that
we have received, we actually have more time and
more oral comment. And I thought the webinar
format was fantastic in allowing people that can't
come to the meetings to be on it and I am going to be certainly, as an individual, encouraging us to do these more as well in the future.

I also would like to thank all of you for your written comments. We had 2,955 pages to read. And I want you to know that at dinner last night, I did learn that most everybody on this board has read all almost 3,000 pages, which is kind of scary. People took off an entire week last week. I mentioned Lisa de Lima here said she took off a week to spend the 40 hours just reading, day after day. So, that is an example of what we do in terms of our time. We do read the written comments.

Sunset review, just a reminder, sunset review consists now of two meeting, two opportunities for oral and written comment and all materials under sunset review come from the subcommittee with a seconded motion to remove, a seconded motion to remove. So, that is how we will be working on it when we get into our work part later this week, starting tomorrow afternoon.

Annotations. There is a lot of
confusion with annotations, apparently, I have seen in the written comments. The NOSB can make annotations and we are doing so. Annotations, a rulemaking procedure, are now separate from sunset review. So, we will vote on the sunset materials and based on the public comment and comment at this meeting this week as well and our view, we assume that further annotations will probably be needed for a number of individual materials so that when each of us, as NOSB members are presenting our materials or another board member, if the lead person forgets to do it, we will state that we are going to be presenting the material for vote but we will also clearly state that we are likely to be developing annotations for this material so it will be back in subcommittee for new petitions or annotations and these will, immediately following this meeting, at the next executive meeting, these annotations will be officially added to our subcommittee work agendas.

And if any of you out there don't quite understand what I just explained, feel free to ask,
especially the officers of the board or Executive Committee to be sure that you understand how it is that we are going to do that just in the full transparency as to what it is that we are doing.

So, I am assuming that we will bring back to the April meeting a number of annotations related to several of these materials that we will be completing our review on this week.

Breaking up sunset. I found it a grueling year of work and I don't know about the rest of the board but I think we all did. And the NOSB will be making some suggestions to the NOP about breaking up sunset reviews so that we don't have deal with 200 substances all at one go. It is, actually, pretty ridiculous. And so we would really, really appreciate NOC, for example, or some groups of you out there, give us some recommendations on your ideas as to how you think that we could break it up in a manner that we would, all of us, be able to do due deliberation to every material in an appropriate manner but break it up.

Technical reports. There is quite a
bit of written public comment and also I heard again
at the NOC meeting I attended for a while yesterday,
confusion about TRs. I emphasized in the last year
or so we have improved in our work with the NOP
eormously. Collaboration between the NOP and the
NOSB has definitely improved and certainly that has
been one of the goals of my leadership and part of
that is to really be pushing to get more TRs. We
couldn't, I don't think, have handled more than we
got. The NOSB can and does ask for TRs. We
received 39 technical reports for Sunset 17 and
some of those TRs covered more than one material.
We have already requested five TRs for the sunset
18 materials and we will be requesting more TRs
following this meeting in order to further review
and possibly annotate or reclassify some of the
Sunset 17 materials.

In 2014, I asked them that the NOP spend
$510,576, over half a million dollars, on technical
reports. And so far in 2015, the NOP has spent
almost $300,000 on technical reports. So, we are
going them. We are asking for them, and we
appreciate your push to make sure we get as many as we need to do due diligence on the analysis of all these materials.

So, this has been an absolutely incredible step forward over all the other sunset reviews that have taken place during the history of the NOSB. It really is tremendous the amount of data information and science that we have received.

Authors of technical reports. I know that there are a number of people that want to have the names of the human beings that actually did the technical reports. Presently, the identity of our TR contractors are all available to us, the NOSB and the public. They are found on the first page of the technical report. That lists the contractor at the bottom of the page. You will see it in the footer.

And as with all federal contracts, the contractors have to identify potential conflicts of interest and go through the normal federal procedures for getting a signed contract based on
the RFPs. So, that is the best that I can do and, personally, I think that is perfectly adequate for us, based on the quality of TRs that we are now getting, which are night and day improvement over the TAPs of past sunset reviews.

Next and my final few words are to the NOSB members. I know that all of you were voting on a lot of materials this week. It is quite stressful. I know you have read the written comments. I know. I have heard telephone calls and numbers of hours and responses from people. Some people start the second the first comment is posted, like Harold Austin, and I think Ashley starts the second they start getting posted. Others of us wait until we can look at the whole lot all at once and take an entire week off work and spend 40 hours working on it.

I know that each of you NOSB members have worked to review all of the materials against the OFPA criteria. We have discussed this many times on subcommittees and in Executive. We know it is not a straightforward test. It is not a
simple yes and no. The reality is far more complex.

As a person trained in science, I look for a lot of facts from peer-reviewed research, articles, and I assess the probabilities. But as a person trained in ecosystem analysis, I also look at every material as it might be applied as part of a whole system, with all that implies for synergy. As a person trained in law, I look for equity, balancing the hardships, because whatever we decide in our voting this week, NOSB members, we will negatively potentially impact some stakeholders and positively impact others. And we consider many of these stakeholders to be our personal friends and colleagues. So, it is not easy.

One of the public comments I read in the last week or so, there was a quote from Albert Einstein. We can't solve problems by using the same kind of thinking that we use when we created them. I agree with that.

So, as we make our decisions, I ask all
of the NOSB members to look for positive long-term systems-based solutions when you look at these materials that you are going to be voting on and always keep the whole picture of organics in clear view. Don't get lost in the process and, above all, be kind and compassionate to one another.

So, thank you.

Our final presentation before the break is Dr. Lisa Brines. She is the National List Manager and she will present the materials update and summary of new and outstanding petitions.

DR. BRINES: Good morning, everyone. Yes, I will try and make up a little bit if time here. Thanks.

So, as a reminder, for all materials that are on the agenda for this week's meeting, materials are evaluated against specific criteria, which are provided for in the Organic Food Production Act of 1990. And all documents the Board is reviewing are aligned with those criteria, including the petitions themselves, the technical evaluation reports, and the NOSB checklist.
There are different criteria for evaluation of materials that are under review for production uses, proper livestock uses versus handling. And in addition, there are other criteria that also apply to synthetic processing aids and adjuvants that are provided for in the regulations at 205.600(b).

So at this meeting, the Board will be making recommendations on six materials that have been petitioned for use in production and handling. In addition, there are 198 material listings that will be considered under the Sunset 2017 review. And again, this is the second meeting at which those sunset materials will be considered and the Board will need to complete its review of the Sunset 2017 materials at this meeting.

And again, as Jean mentioned earlier, some of those materials also have distinct separate proposals that are under consideration for annotation changes but those are not considered part of the sunset process and will be considered separately. As part of that review, if those
separate proposals need to be considered or postponed to a future meeting, that is certainly an option.

Okay, so as far as the crop materials on this meeting's agenda, there are four petitions that will be considered: laminarin petition to remove one of the uses of lignin sulfonate from the National List; a petition to add sulfuric acid; and a petition to add seaweed extracts or aquatic plant extracts to the National List.

In addition, there are several petitions that are currently under subcommittee review and will be considered by the full Board at a future NOSB meeting. Those include a petition for aluminum sulfate, a petition to amend or add a new annotation for ash from manure burning on Section 205.602 of the National List, a petition to add soy wax to the National List for log-grown mushroom production, and a system to add squid and squid byproducts to the National List as a fertility input.

And currently, there is a technical
report under development for the squid petition and a technical report is under review for the crops committee for aluminum sulfate.

Just recently, we did have one petition that was withdrawn from review from the crops committee, which was the petition for anaerobic digestate, which has been pH adjusted with sulfuric acid. We understand that that petition may be revised and resubmitted to the Board at a future date but the current petition is posted on the NOP website for petitioned substances.

For livestock materials, there are not petitions that will be considered at this meeting. However, there are several under subcommittee review. We do have a trio of materials that have all been petitioned by different petitioners for use in poultry litter treatment and those include acid-activated bentonite, aluminum sulfate, and sodium bisulfate. And in addition, there are still ten aquaculture petitions that are currently under review.

For handling, the Handling Committee
will consider two petitions at this meeting. First, is the petition for sodium lactate and potassium lactate and, secondly a petition to amend the annotation for flavors on the National List.

Okay, in addition, there are two other petitions that are currently under subcommittee review that will be considered at future NOSB meetings. The first is a petition for hypocholorous acid and a technical report for that substance is currently posted on the NOP website. And in addition, there is a petition to add oak beta-glucan to Section 205.606 of the National List.

Okay, so one reminder on voting procedures. So, for petitioned substances, the NOSB will typically vote on two motions. The first is for materials that have not been previously classified by the Board. So, those motions will generally be to classify the substances either synthetic or non-synthetic. That is for the production or handling -- correction crop production or livestock production uses. And then
in addition for some handling materials, they may also be classified as agricultural or non-agricultural. Typically, that second motion for petitions is the motion to list, remove, or amend the National List.

And as specified by OFPA, a two-thirds majority is needed for any decisive motion. So, typically, we have a Board of 15 members, which is ten votes but with 14 voting members, that two-thirds majority is still a 10 votes that is needed. So, for those 14-vote motions, that includes 10 votes.

For sunset 2017 materials, again, this includes the majority of materials that are on the National List which are scheduled to sunset over several dates in 2017. The complete list of 2017 sunset materials is on the agenda. There are several sunset dates associated with those. Those are published in our program handbook. The earliest sunset 2017 date is in March, 2017.

And again, for annotation changes, there are several of them being considered by the
Board at this meeting. Again, those are being considered separate from the sunset process. If they are recommended by the Board, they will proceed on a separate regulatory track but because they are not tied to the sunset time line, any of those annotations changes also can be considered at future NOSB meetings. So, again, for those materials that are currently on this meeting's agenda, but for other materials, they can be added to the work agenda of the Board to be considered a future Board meetings.

A couple quick previews for the Sunset 2018 materials. There are 15 listings for crop and handling materials, which are scheduled to sunset in 2018 either in May or in November of that year. So, those will start consideration by the Board at the public meeting next spring and conclude their review in the fall of next year.

And we have several technical reports that are in development. None of these are available just yet but we expect them to be available in early 2016. Those include peracetic
acid for crop use and several handling materials, including carrageenan, cellulose, glucono delta-lactone, and potassium hydroxide. A subset of those materials are just limited scope technical reports but that will be indicated on the report when it is posted online.

And then finally, again, as I mentioned earlier, all of the materials and their sunset base are publicly posted in a handbook at NOP 5611. So, it includes the full listing, as well as sunset dates for each material on the National List.

And again, just a quick update on the petition process. As you remember, the Board had passed a series of recommendations in April 2014 to update the National List petition process, which included several changes, some to the allowance for confidential business information and a second recommendation to revise the petition process to make it a more streamlined process for annotation changes and other changes to materials that are already on the list.

So, we are continuing to work on those.
They won't become effective until we publish the updated petition guidelines in the *Federal Register*. So, in the interim, we are continuing to receive petitions that align with the current petition guidelines that were published in 2007, some of which do have confidential business information, although in our eligibility review, those materials were continuing to notify the petitioners of this outstanding recommendation to see if they want to make amendments based on that.

And that's all I have for today, unless there are any questions. Thank you.

CHAIR RICHARDSON: Are there any questions from the Board for Dr. Brines?

Thank you, Lisa.

We are going to be taking a break in just a couple of seconds. I do want to point out that the next presentation by Dr. Sonny Ramaswamy will also be done via video live from Washington, D.C. And should we have any technical difficulties with that, which hopefully I don't anticipate, I would like to point out that it will mean that the first
few of the public commenters may be on deck by as early as 15 minutes from now and that is Nicole Dehne, Nate Lewis, Nate Allen, Tom Stearns. So, your turn may become up earlier than you expect. And so, please, it would be most appreciative if you could be back in the room in time to either hear Sonny, which hopefully is the case, or start your public comment.

I will also point out we will be taking a 15-minute break so we would be coming back at 20 minutes past 11, just five minutes late. So, that is not too bad. And we will break sharply at 1:00 in order to go out and meet the demonstrators around the issue of hydroponics. They are going to be outside this conference center with speakers and it would be wonderful if we could all be out there to show our interest in the topic of concern to them.

So, we will take a 15-minute break now. Please, if you would, be back at 20 minutes past 11:00. Thank you.
went off the record at 11:05 a.m. and resumed at 11:23 a.m.)

CHAIR RICHARDSON: Okay, I would like to ask Miles McEvoy if he would please introduce our next speaker. Miles.

MR. MCEVOY: Yes, I would like to introduce Dr. Sonny Ramaswamy. He is the Director of the National Institute of Food and Agriculture. Dr. Sonny Ramaswamy was appointed to serve as Director of USDA's National Institute of Food and Agriculture in May of 2012, as part of USDA's Research, Education, and Extension Mission, Dr. Ramaswamy oversees the NIFA awards funds for a wide range of extramural research, education, and extension projects that address the needs of farmers, ranchers, and agricultural producers. And he has a very extensive biography but Sonny, I will just turn it over to you so that you can explain the things that USDA is doing to support research in organic agriculture. Thank you for joining us today.

DR. RAMASWAMY: All right. Well,
thank you very much. Can everybody hear me? I'm getting feedback. Could you maybe mute the telephone thing there?

MR. MCEVOY: We can hear you pretty well. I think if you just.

DR. RAMASWAMY: You can hear me?

MR. MCEVOY: Yes.

DR. RAMASWAMY: Okay, I'm getting a lot of echoing and feedback here in my office. Regardless, I will just continue on.

Steven, I wonder if you can go ahead and mute the polycom device or whatever that is because that is the one that is giving the feedback. Okay, perfect. Thank you. Wow, that is so much better.

So, in any case, thanks for having me here. I appreciate Michelle Arsenault, particularly, and Miles as well accommodating me to come through this medium here. I promise you I will be with you when you meet in April here in Washington, D.C. Unfortunately, I had to be in two different places, one of which is a congressionally mandated Foundation for Food and Agricultural
Research and I will come back to that entity in just a little bit. And we have a Board meeting here and that is congressionally mandated. And so I had to be here and I couldn't see myself flying out to Vermont, although I really, really wanted to go to Vermont this time of the year because of all the wonderful colors and, of course, more importantly, to be able to engage with you right there in the same room and have a conversation as well.

So, I think we have got about 35 minutes or so, per my clock on my computer here, and I want to speak only for about ten minutes or so and then leave a good bit of time for a conversation and I look forward to this conversation myself.

I can tell you that we have had, the National Institute of Food and Agriculture, has had an excellent relationship with the National Organic Standards Board itself and have had staff, NIFA staff not have been engaged with you, Matt Ngouajio and Steven Smith being the most recent individuals that have been engaged with you.

And actually here, oh, gosh, about
three years ago, it was when I first came onboard, I met with some of you on the National Organic Standards Board itself and I heard quite a bit from some of you either in person or by email separately, this is coming on over three years ago, about the need for NIFA to step up its game in regards to the support of the need for new knowledge and that our organic producers across need. And so we made a commitment, I, personally, made a commitment and we collectively at NIFA made a commitment that we are going to up our game.

So, if you look at USDA at a broader level, strategic plan itself, and the research, education and economics mission area, strategic plan and then that sort of cascades down to NIFA as a strategic plan itself, which we developed and released this past year. So, all of these sort of cascade down into what NIFA does. We clearly articulated that from a science and education perspective. And education I use in the broadest of terms, both in regards to translation of
knowledge into innovations of solutions that is delivered, that is translated and delivered by our extension folks and also the education of people wanting to enter into the organic enterprises that might be through, for example, our beginning farmers and ranchers development initiative or other initiatives that we have got. And also people, young people that are studying at our universities and colleges in their education as well. So, we have made a commitment in our strategic plan as well that we will help develop and make available the knowledge that is necessary for our organic production systems in America to be a viable and thriving proposition.

And in line with that, starting, like I said, three years ago, we started incorporating based on input provided to us by various individuals in the organic community on how do we enhance our opportunities that we provide. Of course, we have got the organic transitions program and the Organic Agricultural Research and Extension Initiative. Together, they constitute
approximately about $23 million to $25 million per year. But we also made a commitment to more broadly, particularly in our flagship Competitive Grants Program, Agriculture and Food Research Initiative, to incorporate into the request for application, funding opportunities for the organic community. We did that and I will come back to that in just a little bit as well.

So, long story short, over the last few years now, we have really increased our efforts in these areas. And again, we got together with Anne Alonzo and Betsy Rakola and others. And in fact, we have also had multiple conversations and webinars and things internal to the agency itself, where our own agency staff has undergone training on how to support organic enterprises in our portfolio funding that we offer.

So, if you look at our portfolio funding, it is about $1.55 billion in fiscal year 2015, we have got two big buckets of funds. One big bucket over about $800 million, $850 million to $900 million is what we refer to as supporting
particularly the land-grant universities, providing support the experiment station and cooperative extension service. And in that portfolio, Matt Ngouajio did an analysis and we are providing approximately about, at the land-grant universities and querying what the term organic, approximately about $5 million to $6 million per year are attributable to support of organic enterprises across the United States of America. And then you know, if you are interested, we can break it down by state as well and we can provide you those data. But at the composite level, it is between about $5 million and $6 million across the United States.

And the other big bucket that we receive is the competitive funding. In the competitive funding, we have got a whole bunch of, it is about $700 million or so. There is a whole bunch of lines in there, starting with the AFRI Program, the Agriculture and Food Research Initiative, especially Crops Research Initiative, the Organic Agricultural Research and Extension Initiative,
the Beginning Farmers and Ranchers Development Initiative, and on and on. There is a whole slew of them that we do. And in that portfolio funding, it is approximately about $25 million. In 2014 about $25 million was made available in the competitive grants arena. And as I said, the biggest part of it, is, of course, the Organic Research and Extension Initiative itself.

And if you just look at the AFRI program, while we have received a few more grant proposals, in fact if you look at where we started in 2012 and tracking the data into 2013, into 2014, and into 2015 itself, there has been a nice increase in the number of proposals submitted to us in the AFRI program worth up to about $8 million this most recent year in 2014, where we have the data. But the ones that got funded, it is a very, very small amount of funding that has gone to organic efforts in our AFRI portfolio itself. And it is only about, in fact if I look at the actual data, there is a table that we have drafted, it is just a bit over a million dollars. So, just about a million
dollars has gone to organic enterprises.

And so there is a few reasons why. We are continuing to encourage people to apply to us, to our competitive grants portfolio. As I said, we have incorporated appropriate narrative into our request for applications as well. But in querying folks that are potential applicants, we have discovered that they would much rather go to the organic Agricultural Research and Extension Initiative and the Organic Transitions Program because the funding rate there is well above 20 percent funding rate. That means at least one out of five or so grant proposals do get funded.

In contrast, in AFRI, particularly in the plants area, it is about six percent funding rate. The average across the board and AFRI is only about 13 percent and in plants area very specifically, it is only about six percent or so.

Also, AFRI tends to have more of a fundamental science, sort of a flavor to it. And so oftentimes people that are wanting to work in the organic enterprise might find themselves
hard-pressed to come up with the fundamental
questions, although we remind them that it is not
necessary that you have to only undertake
fundamental science in AFRI. We do have a lot of
what I like to call as adaptive and integrative
research as well, research and extension that is
undertaken as well.

So, we are still trying to analyze the
data and encourage people to submit their grant
proposals to us in the organic community as well.
And again, as I said, because the funding rate are
so much higher in the other programs, particularly
Organic Agriculture and Food Research and
Extension Initiative, people aren't submitting as
many proposals to us.

The second thing that we have done just
as of last year is we have created a special program
called the CARE program within AFRI itself, the
Critical Agricultural Research, and Extension
Program, CARE, C-A-R-E.

This particular program is to help
producers meet their needs for the tools they need,
for the knowledge that they need in the immediate term, not some long-term fundamental science that needs to happen over the next five to ten years and somehow somebody comes along and translate that into knowledge that is of relevance to the end users. The CARE program has carved out as part of our AFRI Foundational Funds, a specific opportunity and I would urge you, the National Organic Standards Board to please convey this information, disseminate this information to the organic community that might ought to look at the CARE program itself as a possibility because it is very explicitly meant to help undertake the research and extensive efforts that result in immediate term, tools and technology, the knowledge that the producers can apply in their day to day endeavors as well. So, that is an area that you might want to encourage people to apply to.

And AMS has taken the lead in providing the Secretary, Secretary Vilsack, we have what is referred to as the white board report and I am sure you know everything there is to know about the white
board reports but NIFA provides information to
those white board reports as well and a report was
put together back just about a month ago, September
the 15th and that was sent to AMS to be inserted
into the report to the Secretary and it provides
more detailed information of some of the things
that I just discussed here over the last few
minutes.

The last thing I want to discuss is the
Foundation for Food and Agriculture Research.
This is a new avatar that was created by the last
Farm Bill. And as I said, the Board is going to
be meeting here this week and I am going to be
participating in it. And the organic community
might want to look at the foundation. The Board
has just been constituted. They have just hired
an Executive Director, a woman named Sally Rockey
who used to work for NIFA back in the old days.

So you might, if there are things that
the National Organic Standards Board has
discovered that are going a-begging, you might want
to put together concept notes, white papers on
areas that you think that the Foundation for Food and Agriculture Research might be able to provide you additional funding.

Incidentally, what Congress said in the Farm Bill is that the Foundation for Food and Ag Research needs to be complementary and supplementary to what we do and not duplicative. And if the organic community feels like that they are not getting enough resources being deployed, you might want to think of what sorts of areas need to be supported and send those concept notes, those white papers, you can send them to me, I am on the Board; the Secretary, Dr. Woteki, Catherine Woteki; the Under Secretary for Research, Education and Economics; Chavonda Jacobs-Young, the Administrator for Agricultural and Research Service, France Cordova, the head of the National Science Foundation and the head of NIFA, i.e., myself, serve on the Board in an ex officio capacity.

So, if you have got some ideas, send them to me. You have got good representation.
The organic community has good representation on the Board. Nancy Kramer, she is from North Carolina State University. She is on the Board as well. And there are others on that Board that are also deeply interested in the enterprise that you all are interested in as well. So you might want to go ahead and send any thoughts that you might have to me.

The last thing I wanted to share with you is the two questions that I received. And the first question was whether we, NIFA, had inserted the appropriate language in regards to the request for applications and that is opportunities for organic effort in the Agriculture and Food Research Initiative. The short answer is yes, it has been done. And I would encourage you to take a look at it. If we need to strengthen the language, let us know, please, and we will certainly strengthen the language. If you go to our website at NIFA.USA.gov, the very front page has grant opportunities. So if you just put AFRI in there, it will pull up the request for applications. Take
a look at the language that we have inserted in there. If it is not doing what you want it to do, let us know and I promise you we will consider it and, as possible, we will incorporate it as well.

The second thing that I wanted to share with you, there was also a question about the capacity-building grants that we offer up to the 1890, the historically black institutions, the historically black land-grant universities. Currently, the RFA, request for application, does not include verbiage pertaining to organic. I discovered it just today, as I prepared to engage with you. And I have sent an email to the relevant folks within NIFA that manage that program and I have asked them to insert appropriate language. And I can tell you I have received an email from them just a few minutes ago and they are on it. And the next go-round, which will come out sometime in February, will include appropriate language in the capacity-building grounds as well for the 1890s institutions.

I have also had people look at our
specialty grants research initiative. This is on fruit and vegetables. It does not have language pertaining to organics. And again, I have toggled our folks to see how we can incorporate relevant language not unlike what we did with AFRI itself.

And last but not least, the other grants program that we have got is the Biotechnology Risk Assessment Grants Program, the BRAG program. And in it, we have one of the objective, one of the goals that we want to support is in the realm of organics and the RFA includes information relevant to organics in there.

The second question that was asked of me was the comments that we request on our request for applications and other works that we do, particularly in AFRI, are those comments to be submitted within six months or after the RFA comes out, immediately after issuance of the request for application. The short answer is we say that we would like to receive comments within six months of the release dates of the request for applications. And we do get a number of people...
submitting comments but I can tell you also that we get comments throughout the year, through a website we have created and that information is not destroyed. It is actually utilized. And so Matt Ngouajio and Steve Smith and the others of our staff utilize every bit of information that is provided to us through the -- the input that is provided us by the organic community as well.

So with that, I am going to go ahead and stop and see if folks have any questions.

CHAIR RICHARDSON: Thank you very much for your comments. I know that Zea Sonnabend really wanted to ask you some questions. Unfortunately, she is on her way from Philadelphia; her plane was canceled. So, I would like to --

DR. RAMASWAMY: Jean, are you going to be moderating this in regards to the questions to be asked? Because maybe it is all muted now. Can you hear me okay? Can you hear me? Now you can? Okay.

Dr. Ramaswamy, Zea Sonnabend would like to have asked you some questions. She may need to
follow-up by email, however, because she is still delayed at the airport. But I know that Dr. Walker, who is a research agricultural professor may have some additional follow-up questions for you, Calvin.  

DR. RAMASWAMY: Okay, that works. Obviously, this medium of my being here in D.C. and utilizing Skype, it works to an extent. But that interactivity may not be possible. So yes, absolutely. I look forward to receiving an email or emails from our colleagues on the National Organic Standards Board.  

CHAIR RICHARDSON: Calvin, do you have any more questions?  

MEMBER WALKER: I'll be somewhat like Pontius Pilate. I have no other questions. The questions that Dr. Ramaswamy had addressed were the three that I submitted.  

CHAIR RICHARDSON: Okay, thank you, Dr. Walker.  

Question from Dr. Taylor.  

MEMBER TAYLOR: Thank you so much for
your presentation, Dr. Ramaswamy.

We have gathered information in regard to the research priorities that address issues of concern and interest within the organic community and also concerns of interest that have come up within the Board meetings, the subcommittee meetings. And we have put together a document, research priorities for the 2015 year and the previous Board meeting fall meeting years as well. Where should this type of information be best brought together before you are a committee so that the relevant information that we have gathered will impact the request in the request for a proposal?

DR. RAMASWAMY: Okay. That question that came through is pretty garbled. So, Steven, can you repeat the question for me, please?

Were you able to listen to the question? Then, can you repeat it? Can somebody repeat it? Because it was garbled and a lot of echoing as well.

CHAIR RICHARDSON: Okay, I could try to repeat it. Can you hear me? Can you hear me?

DR. RAMASWAMY: Yes, I can hear you.
CHAIR RICHARDSON: The question from Dr. Taylor is that the National Organic Standards Board has put together its research priorities document and she would like to understand more clearly where this information and recommendation could be sent that would most effectively get appropriate funding.

DR. RAMASWAMY: Got it. So, indeed, every year we receive the research priorities from the National Organic Standards Board and our colleague at the AMS are very kind and they share that with us as well. And I would say that we take those research priorities and questions to heart and that is incorporated into our request for applications in different parts, whether it is in the Organic Agricultural Research and Extension Initiative, or in the AFRI program, or in the Beginning Farmers and Ranchers Development Program. There is different places where we can incorporate those questions and priorities, including, by the way, in the support of experimentations and extension. So, we
appreciate your providing those priorities and I would say you could send them to me directly. My email address is Sonny, S-O-N-N-Y, at NIFA.usda.gov and I will be certain to get it out. I know that Matt Ngouajio and Steven Smith get it as well. And as I said earlier, AMS is very, very helpful as well. So, we do get those questions sent to us from different places but I would ask you to go ahead and send it to me directly as well. And I promise you we will look at those and incorporate those as appropriate, as relevant, into our priorities.

MEMBER TAYLOR: Thank you.

CHAIR RICHARDSON: A question from Dr. Thicke.

MEMBER THICKE: Thank you for your comment and your information. One of the issues that the organic community is struggling with is the GMO contamination of organic crops. And it can undermine markets, it can disqualify products, and so on.

And we feel like we are doing as much
as we can. And I am wondering if USDA, through NIFA or other research is doing anything to reduce contamination from the conventional side of agriculture.

DR. RAMASWAMY: No. Yes, well, so as I said earlier, within the BRAG Program, the Biotechnology Risk Assessment Grants Program, we do have efforts at looking at contamination of the organic production systems.

Your question is in regards to conventional agriculture and its impacts. And I know for a fact, as some of know I used to be at Oregon State University back in a former life, and I know for a fact that the folks at Oregon State University have been working on this issue of conventional versus organically produced seed because that is, in Oregon, the big thing is to produce seed, for example, vegetable seed.

And Oregon State University has deployed funding from the states and the funding that we send in regards to support of experimentation and extension and their
undertaking studies that they do this thing called pinning, as they call it, that creates sort of a boundary around the crops that they are growing. But there is some research that is going on at Oregon State University and at a few other institutions as well.

I know that the folks at Indiana University -- pardon me -- Purdue University in Indiana have also started thinking of how to support the organic producers not only in regards to conventional agriculture seed contamination, pollination and things like that but also in regards to the use of pesticides for example. So, you have a drift occurring and that might have an impact on organically produced crops. And so I know Purdue University folks have been addressing it, including in the viticulture area as well.

So, if you wish, we could go ahead and have an inventory done across the United States what sort of effort is going on and the kind of work that needs to mitigate the impact of conventional practices on the organic. And we can get you that
information if you are so interested.

    MEMBER THICKE: That would be great to have that information but it would also be good if you could, in your research proposal request, have some initiative to have researchers working on that.

    DR. RAMASWAMY: Yes. I understand. Yes, that is a good point. And to tell you the truth, I don't know if it is present portfolio funding but I will certainly -- I'm looking for my pen here so I don't forget this. So, I am making an note of it. I'm going to ask my staff if we indeed have that.

    CHAIR RICHARDSON: Great. That is very good. Are there further comments or questions from the members of the NOSB?

    Yes, question. Dr. Walker.

    MEMBER WALKER: I have one. I think it was addressed last week but I wanted to hear it from Dr. Ramaswamy to share it with the group. I think I talked to one of your administrators on last Wednesday.
We were speaking in terms of the organic community needs a lot of research, needs a lot of help. But many times when grants are written, sometime the reviewer may not have, we believe, a deep appreciation for organic. Could you speak to the selection of reviewers for proposals such as organic and sustainable agriculture?

DR. RAMASWAMY: Okay, Dr. Walker, I only caught the last part of it. Can somebody repeat that?

CHAIR RICHARDSON: Yes, okay. I will try to repeat. Dr. Walker is concerned that it is often not that easy to get a good quality funding at universities for organic agriculture and he is interested in knowing what kinds of peoples may perhaps be on the review panels looking at these proposals that might have a broader way of understanding modern trends in agriculture. And this is certainly common, a I found, at the University of Vermont and all land-grant colleges, getting money for organic is always much more difficult.
DR. RAMASWAMY: Yes, I understand. So, here going back actually about three years ago we asked for your help for the National Organic Standards Board's help and the organic community's help in a fine potential panelist forest. Not only panelist, but also individuals that would do ad hoc reviews, offer ad hoc reviews.

So, very specifically, on the question in regards to impacts on food quality, that is maybe it is the sensory aspects of it, maybe it has got the market basket analysis aspects to it, it has got the healthfulness traits of the organically produced fruit, vegetables, and produce and things like that. I don't know the specific answer to how we go about doing it but I make a note of it.

Dr. Walker, we will get you a response to that as well. Okay?

And really, needless to say, it is critically important. If you could please help us in helping you by unifying people that can actually serve on panels that can, indeed, ask these types of questions about food quality. And I don't know
in the RFA is not unlike the question that was asked previously about impact of conventional production facilities on organic and is it in our RFAs. I don't know if in our RFAs explicitly we have incorporated looking at food quality issues as well but again, this is something for me to toggle my staff on and we will get back to you.

CHAIR RICHARDSON: Any further questions for the Board?

MEMBER TAYLOR: Yes, I have one question.

CHAIR RICHARDSON: Question. Dr. Taylor has a question.

MEMBER TAYLOR: I'm wondering would you think that it might be possible, I know I am from a 1890 land-grant institution and we are often heavily courted by GMO agriculture, agribusiness, Monsanto, and such, are strongly with the student body, strongly within the college. And I wondered if it might be possible for your agency, your organization, as well as the National Organic Program to maybe merge on some kind of education
and training capacity-building that would share the information and knowledge about organic farming from a different perspective and also provide avenues of internship and training for the farmers, for our students, coming from your agency and engaging also the National Organic Program.

DR. RAMASWAMY: So, Dr. Taylor, I only caught the occasional word in there, internships and things like that.

If the Chair could go ahead and repeat the question for me, please.

CHAIR RICHARDSON: Yes, the interest here is to be able to further expand the understanding of the kinds of agricultural research that might take place by working closely with the National Organic Program and with more of the land-grant universities and the students so there is a broader understanding of the work that your organization does.

Dr. Taylor also is at a land-grant university with all of its delights and drawbacks.

DR. RAMASWAMY: And so I don't know --
you know we have not done an inventory across the United States and looking at what are some things that are going on to enhance the understanding of students but I can give you examples from several universities that I traveled to or that I know of personally where they do have, for example, either courses, experiential educational opportunities, or student-run organic community supportive agriculture-type endeavors. I was in Lafayette, Indiana just last Friday and I got to see the student-run organic farm that is out there. The students that are in agriculture, or students in business, students in engineering, from throughout the university, there is about a couple hundred kids that are part of the farm. So, it is not just going and working in the soil and planting plants and harvesting and all that but what they have done is create a certificate program and/or actual courses for which you get credits. So, that sort of effort is going on at Michigan State University, at Oregon State University, University of Wisconsin, at University of Florida, and other
places as well. But we have not taken that comprehensive survey of who is doing what, how, et cetera.

You know, along with the increasing interest in food production systems and organic food, et cetera, there has also been an increase in the number of such courses and the number of experiential opportunities and things like that, too.

CHAIR RICHARDSON: Great. Thank you very much. Any further questions? No? Okay, great. I think that we would all like to thank you very much indeed for being here today. I know it was very difficult to fit it into your schedule. We very much appreciate it and this has been a good dialogue and I know that you will receive additional emails and communications from members of the Board as the month goes by. Thank you.

DR. RAMASWAMY: All right. Thanks so much. I look forward to those emails and I know that I have got to do my homework on two questions. One is on conventional and organics, are they in
our RFAs. And the second one is Dr. Walker's question on the food quality type or them being funded -- do we have panelists that can recognize it and in our RFAs.

I think those are the two that I have right now as my homework and look forward to receiving more emails from you folks and we will get back to you in short order. Okay?

Thanks again. I will see you at NOC in April.

CHAIR RICHARDSON: Thank you very much. And just a reminder to everybody out in the audience that every year we do work hard in our subcommittees to develop and identify specific major items that we hear from you that are the most critical in terms of necessary research priorities. And it is always tough and land-grant universities are getting the right kind of grant money to help to work on research that involves organic agriculture, as we all know if we have worked in universities.

So, anything that you can get to us
during the year will help to inform the work of the materials subcommittee and Dr. Taylor was the lead person in putting that document together this year and we continue with that work on an annual basis.

At this point in the agenda, we are now about to start doing public comments. And I would like to begin to invite the people to come up. The first person who is going to be presenting will be Nicole Dehne from the NOFA-Vermont and she will be followed by Nate Lewis from Organic Trade Association on deck.

I know that Michelle has some administrative, apart from wheeling chairs around right now, she has some administrative comments to make. She is the person that runs the time clock. And Michelle, would you like to give out your instructions over the mike to tell them what they need to be doing?

MS. ARSENAULT: So, I know most people in the room are old hat at this but if not, if you are new, we have a timer on the podium and you will see three lights green -- yellow, orange, and
green. And when you start talking, I will set the timer. So, you can come up to the podium and start talking.

If you have a PowerPoint presentation, I had a slide advancer here. So, I know who has PowerPoint presentations. So, just look for that and you can advance your own slides.

We had a couple of cancellations. So, people that are going a little bit later in the afternoon, your time may be adjusted by five or ten minutes or so. So, don't leave the room with 30 seconds to spare.

CHAIR RICHARDSON: Okay, thank you. The first speaker, Nicole Dehne.

MS. DEHNE: Okay, can you hear me? Good morning. My name is Nicole Dehne. I coordinate NOFA-Vermont's Organic Certification Program, Vermont Organic Farmers. I would like to welcome the Board, NOP staff, and audience members to the Green Mountain State. Although, of course, at this time of year, our mountains aren't so green but I do hope that everyone gets a chance to go
outside and catch some of the fall foliage before it is all gone.

VOF has been certifying organic farms and processors since 1985. This year, we will have certified more than 600 organic producers in the state. We are fortunate in Vermont to have a thriving local and organic movement. Vermont has, and I think you are going to hear this statistic a few more times, but Vermont has more organic farms per capita than any other state and we have knowledgeable consumers that support these farms by purchasing the highest percentage of local food nationwide.

And I should warn you with these statistics that, while you are here, there is no shortage of delicious organic food. So, it is up to you to monitor your own intake and there might even come a time when you need to cut yourself off or risk some serious overeating. And of course, please take considerable care when sampling our cheeses.

So, speaking of eating delicious
organic food, I would like to invite everyone to an event Tuesday evening from 6:00 to 9:00 here at the Stoweflake in the Stowe Room and Atrium to celebrate 25 years of organic certification. Thanks to our wonderful sponsors, we will be featuring product from Vermont Organic Growers, including organic beer and wine made from organic grapes -- I wanted to make sure I got that right -- as well as music, dancing, and roasting marshmallows.

So, please join us tomorrow night to celebrate everything we have accomplished together over the last 25 years.

There is a concerning lack of farmer voice and participation in the national conversation about the organic label. It is extremely valuable to have the NOSB meeting move around the country to give organic producers from different regions the opportunity to get their voices heard. We have made a real concerted effort to get our certified producers to both attend this meeting this week and also to sign up for public
comments to address the Board.

The good news is that we have got a lot of farmers that signed up. So, today and tomorrow, you will be hearing them discuss the topics that mean a great deal to them and their businesses. Some of the topics that will be discussed include about lime sulfur and copper fungicides and how critical those tools are for our farmers, about the importance of having moxidectin and fenbendazole to use only in emergencies to improve the health of their organic animals.

You will hear a lot about hydroponics and about soil being at the heart of what it means to be an organic grower. There will also be growers talking about using biodegradable bio-based mulch as an alternative to black plastic, and about GMOs and the material subcommittee's prevention strategy guidance.

And lastly, you will also hear from a maple producer about how organic maple standards need to be addressed at a national level.

So, I would really like to encourage the
Board to make the most of the opportunity that we have these farmers here to ask questions of them, about how their businesses are affected by the proposed changes to the rule and the National List and I just want to thank the Board for the opportunity to talk today and again warn you about watching yourself around our cheese.

CHAIR RICHARDSON: Thank you, Nicole. Are there questions for Nicole? Thank you.

The next speaker is Nate Lewis and he will be followed by Nathan Allen on deck.

MR. LEWIS: Hello, distinguished members of the Board. Thanks for this opportunity to provide you with comments on your recommendations and thank you for all your hard work to the seemingly insurmountable challenge to Sunset 2017. We are only a few hundred votes away. So, hang in there.

My name is Nate Lewis and in my role at OTA, I work directly with organic farmer members and organic farmer governed organizations across the country and across the world. OTA members
truly guide our organization by engaging directly with our comment development process and by voting for our Board of Directors. It is these features of our organization's transparent engagement and governance, which put us in a strong position to provide comments to you on the necessity of substances allowed in organic farming.

Necessity is one of the OFPA criteria for inclusion on the National List and one of the factors you must consider when deciding whether to recommend removal or relisting for any given substance. It is critical that when assessing necessity, we viewed the use of the substance through the lens of commercial viability. Organic farmers must be able to produce their crops in sufficient quality and quantity to remain financially viable and if the removal of a particular substance will jeopardize a farmer's financial viability, that substance is necessary.

Sometimes new information about health or environmental risks or shifting attitudes about organic production principles may outweigh
necessity when considering to remove or relist substances.

Based on OTA's role as an industry organizing governed and driven directly by organic certificate holders, our comments focus on necessity. Organic farmers themselves are in a better position than any of us to know whether they could stay in business without a particular substance.

OTA submitted the petition to remove lignin sulfonate as a flotation aid because the organic industry told us this substance was no longer necessary. Sheds packing fruit that sink in water, like pears, have modernized their equipment or used alternative substance like sodium silicate. Lignin sulfonate is no longer necessary because it is no longer in use and its removal will not affect organic businesses' abilities to remain financially viable.

OTA supports removing ivermectin as an emergency parasiticide in organic dairy production. We support removing ivermectin
because feedback from our organic dairy producer members indicates that alternatives fenbendazole and moxidectin are effective. This substance is no longer necessary because alternatives exist and have gained the trust of organic farmers. Its removal will not affect organic businesses' ability to remain financially viable.

In contrast, however, OTA does support continuing the allowance of ethylene for regulation of pineapple flowering. Organic pineapple farmers who get their crops to market via wholesale supply chains must produce pineapples in sufficient quantity and quality to satisfy those market demands and they need ethylene to do this. Ethylene is necessary for these organic businesses' continued financial viability and it should be retained on the national list.

Thank you.

CHAIR RICHARDSON: Thank you, Nate. Questions for Nate? Yes, Dr. Walker.

MEMBER WALKER: The views on ivermectin has been kind of broad. How many was
in your survey that you all did that use ivermectin? I know CCOL supported the listing of all three.

MR. LEWIS: I think you would have to refer to our written comments on the specific comments. I tried not to fill up my brain with all that specific detail. It was overwhelming in support of removing ivermectin from our membership via both the sunset survey and direct feedback from our membership.

Nate, is that something you could look up and maybe get to Calvin afterwards?

MR. LEWIS: Sure.

CHAIR RICHARDSON: Okay. Calvin, do you want to follow up?

MEMBER WALKER: Would OTA have any problem if it was approved? Because it is only used for emergency situations.

CHAIR RICHARDSON: Calvin, your voice is so sweet and quiet, we can't hear you. Could you try again?

MEMBER WALKER: The question I had was that many of these parasiticides are used in
emergency situations. It is not like it is used daily.

MR. LEWIS: Right.

MEMBER WALKER: And I am torn, as a voter. I am looking at ivermectin, moxidectin, and fenbendazole all being approved because it seems like they all are needed still because they are not used on a daily basis.

MR. LEWIS: Right. So, I suppose we wouldn't be opposed to its retention on the list but, in the spirit of continuous improvement, this is a substance that could be removed and continue to drive the process forward and maintain the trust and the label.

CHAIR RICHARDSON: Any other questions for Nate? Thanks very much.

The next speaker is Nathan Allen and he will be followed by Tom Stearns.


So, Tom, that means that you are up.
MR. STEARNS: Six minutes, right?

CHAIR RICHARDSON: No, no, no. Good try, though! Good try.

MR. STEARNS: No, I know, six minutes.

CHAIR RICHARDSON: Tom Stearns, take it away.

MR. STEARNS: Good morning. It is really strange to have most people over here, isn't it?

So, Tom Stearns from High Mowing Organic Seeds. Welcome to Vermont. Our farm is about 20 miles from here. You could all come visit, especially if the meeting gets really boring for the last few days and you want to slip out. You guys probably have to stay, though.

So, I have been growing organic seeds for 21 growing seasons now, vegetable seeds. It has been a long time and I have got a few thoughts that I wanted to share.

How many people, despite a show of hands have eaten organic food in their lives? Okay. How many of you know that it was grown using organic
seed? A couple more hands.

A little known fact is that most of the organic food in this country is not planted with organic seeds. This is an industry that is in its infancy. And so we need to really take care of it, nurture it, and invest in it so that we get the right kind of seeds for a completely new kind of agriculture that we are trying to create, the kind of agriculture that organic espouses is one where there is natural disease resistance, natural insect resistance, natural nutrient density. These are things that can be achieved through plant breeding for those traits. In some cases, those are also common things that are done in conventional breeding but, in many cases, it is very, very different. So, let's make sure we have the right tool for the application that we are using it for.

One of the things that I wanted to mention is the public funding for plant breeding is essential. The land-grant universities have established infrastructure for doing plant
breeding. My company is pretty small. For us to
invest in our own whole from scratch plant breeding
program, when there are university programs out
there with this infrastructure already in place but
lacking the funding is sort of an absurd investment
for us to make. So, we have been working with more
than a dozen universities and their plant breeding
programs and we have been licensing varieties from
them, commercializing them, and paying royalties
back to the university. I love doing that. Most
people don't like paying royalties but for us, it
is an investment in our own plant breeding program
in the public sector. So, as often as you can, make
sure that issues is brought to light.

Another issue I want to bring up is
around the rules for organic seeds and what is being
done as Europe as the sunset type of process for
certain varieties and certain crops country by
country. For example, in Europe, certain
countries no longer allow the use of conventional
seed in certain crops because there is sufficient
supply in the organic market. If we were to do this
in the United States, it would be very different. Countries in Europe are much smaller and have distinct growing regions. The U.S. is a very large country, so it is more challenging. But I would propose looking at some possibilities like that and I will tell you more later. Thank you.

CHAIR RICHARDSON: Wait a minute, Tom. Questions on seeds or related matters for Tom Stearns? Any questions from our group? I know if Zea Sonnabend was here, she would be asking questions but as you know, she is stuck somewhere. Hopefully, she will be here later and will be sure you get to talk to her. Thanks very much, Tom.

MR. STEARNS: Thank you.

CHAIR RICHARDSON: The next speaker is Grace Gershuny and she will be followed by Jo Ann Baumgartner.

Grace, are you there? Grace is also a very well-known person for organic in the State of Vermont and nationally. Thank you, Grace.

MS. GERSHUNY: Okay, yes, thank you, Jean. Thank you NOSB members. It is so great to
have you here in my home state.

And I was hoping to bring copies of this book that I am just getting ready to publish for all of you today but, due to a technical glitch, it is not available yet. I am hoping to have them here by Thursday to give out to you.

I wanted to say that last winter our Senator, Bernie Sanders, whom you might have heard of, addressed the NOFA-Vermont Winter Conference and paid us the supreme compliment of calling us revolutionaries. So, I am very proud to claim that title. And it has taken me 15 years to write this book. And I started working on it when I left the National Organ Program staff, which I was on for five years, and I was a principle author of the first proposed rule, which, as many people realize, got a resounding number of negative public comments.

But still, you know the organic industry has been a huge success. And in the time since implementation, it has grown to be a huge industry and yet, still, less than one percent of
U.S. farmland is organic. And this is a problem, in my opinion.

When I accepted that staff position in 1994, Washington, D.C. was the last place on earth I ever imagined myself going. One of my goals in taking that job was to help introduce more organic-friendly thinking within USDA and I think that has begun to happen. And I saw that sanctioning of organic by its former archenemy as a real turning point in the radical transformation of U.S. agriculture. And even though that might have been a bit of a naive vision, I think that it was ironically enough undermined, not so much by a recalcitrant establishment but by the activist community.

So, as many of you know, there was a great deal of public outreach at the first proposed rule and much of that disturbed me deeply on a personal level. Some of that story is in this book. What really made me angry, though, was I really saw that organic advocates, in their passionate desire to have it be perfect, became the
enemy of the good. And in the words of Pogo, we have met the enemy and it is us.

Today's young food activists and aspiring farmers often accept as a given that the organic label has lost its meaning. They believe that industrial organic is not as good as even conventional. So, I have been determined to tell that story. It has taken a lot of work. It has taken a lot of personal grief. And I hope you will read it. I have more extensive comments that I have submitted with some excerpts from the introduction and I thank you for your attention.

CHAIR RICHARDSON: Thank you very much, Grace. Are there comments, questions for Ms. Gershuny?

We look forward to seeing the book, Grace, and thank you very much for your comments today. They are much appreciated.

The next speaker is Jo Ann Baumgartner from Wile Farm Alliance and she will be followed by Michael Sligh.

MS. BAUMGARTNER: Hi. Jo Ann
Baumgartner Wild Farm Alliance. We are based in Watsonville, California.

We urge the NOSB to eliminate the incentive to convert high conservation value areas to organic crop land. This is occurring because it is easier to convert native ecosystems than to wait three years for transitioning conventional land.

The issue is not new to the NOSB. In 2009, their biodiversity recommendation included direction for how producers and certifiers should address this issue with regard to the OSP.

Biodiversity conservation is a foundational principle of organic agriculture. Accordingly, the NOP should have barriers that discourage the conversion of intact biodiverse ecosystems and to crop production.

We are currently experiencing the sixth wave of BC's extinctions in the past half billion years. Unless we alter our course, it is predicted that as many as 30 to 50 percent of all species may be extinct by mid-century.
Conversion is occurring in native flood
lands, grasslands, woodlands, throughout the
world. Conversion can cause significant soil
carbon emission and losses of carbon from woody
biomass, especially if the land is first burned.

Prairie habitat in Illinois, Iowa, and
Minnesota have declined by 99 percent, in the
Dakotas by nearly 50 percent. In the Palos region
of the northwest, they have lost 94 percent of their
grassland. The solution is to take cues from
others. Two organic European certifiers, IFOAM,
and many nonorganic ecolabel certification
programs have requirements to prevent the
conversion of high-conservation value areas as
shown here.

Many NOP-accredited certification
bodies are already versed in this type of
compliance because they also work for other
ecolabels, which use the tools and verification
processes for checking the constant conversation
of high-conservation values has not occurred. And
there is more.
So, we encourage the NOSB to work with experts that understand the nexus between organic agriculture and conservation to develop a detailed recommendation for rulemaking that eliminates the incentive to convert high-conservation value areas to cropland. At the same time, the NOSB should request that NASS incorporate questions into their organic certifier and farmer surveys. We would like to know where new acreage is coming from. Is it being converted from conventional, coming out of CRP land, or from land that has no cropping history?

Let's convert the 99 percent of conventional agriculture to organic before we vow any more conversion of intact ecosystems. Thank you.

CHAIR RICHARDSON: Thank you very much, Jo Ann. Questions? Yes, Calvin.

MEMBER WALKER: Could you make your presentation available to us?

MS. BAUMGARTNER: Yes.

MEMBER WALKER: Thanks.
MS. BAUMGARTNER: And I submitted a longer document to the EAC Committee this summer. So, I could get that to you also.

CHAIR RICHARDSON: Any other questions for Jo Ann? Thank you for that really important presentation. It is much appreciated.

The next speaker is Michael Sligh and he will be followed by Aaron Avila.

MR. SLIGH: Good morning. I'm Michael Sligh. I am part of the original NOSB. I am here to celebrate our 25th anniversary. I think we are here against all odds and because we make a difference. We should take great pride in this collective achievement. However, organic has much more potential to offer. A world in peril that we have managed to codify or reward so far. You know we set out to create the same alternative to agribusiness as usual, a way for farmers and workers to farm with dignity in concert with nature, a way for consumers to get the foods they crave and deserve from a trusted source. However, for us to meet our full potential, we must find
creative and transparent ways to pick up the pace
and evolve our ethic, while not violating our
process or our values in the pursuit.

We are aware of many macro challenges
that are facing us. Our standards are lagging
behind in some key areas. Other labels are
beginning to catch up and even lap us in some key
areas. We also need to do better to defend against
those who want to ride our coattails unfairly.

We also must do more to close the
domestic supply versus demand gap and continue to
insist that polluters pay. We are also aware that
new genetic plant breeding and synbio techniques
are rolling out ahead of our capacity to evaluate
and there is a troubling growth of utility patents
being used in organic seed production.

All this is happening because of rapid
growth and success but also because I think we are
still a little too bogged down. I strongly urge
that we set aside time at the next spring meeting
to really look at these macro issues and how can
we stay ahead of the curve and be all that we can
be.

This is a very unique piece of legislation that, on purpose, we established as a social contract between the organic community and the government. It is one based on transparency, accountability, and trust. But that is a two-way street and we must not allow false and personal attacks against any of us who have the courage, especially, to join the NOSB or maybe, insanely, to join USDA. We must speak out of that. That is not to be tolerated. It cheapens our discourse. It harms our integrity and we must do better. We owe it to the farmers. We owe it to the workers. And we owe it to the future. We can do better and we must. Thank you very much.

CHAIR RICHARDSON: Michael, thank you very much for your comments. I think that I have a question. Colehour.

MEMBER BONDERA: Thank you. Thank you, Michael, for your comments and thank you for coming back to the podium. I'm sorry to force you to do extra walking.
My question actually is regarding something you said that I think is a great idea but it is about how. And so say it were at the next meeting, for example, how should the NOSB be scheduling time to be looking at macro issues and what means would that be achievable or facilitatable, or doable? I think we did a little bit of it here today but I would like your thoughts on it.

MR. SLIGH: Yes, I think we have been nibbling at that. I mean I think the reality is that we may need to set, occasionally, a little more time. I mean it is a burden to all of us. I was there. I know the burden. But at the same time, if the market is outpacing us and we can't keep up, we need to come up with creative strategies to get ahead. Because if we don't, we are going to continue to lose ground against those that may or may not be fair.

So, I think it is coming at us quick. This is about success. This is about just the rapid growth that we are on. And I think it would
serve us well to step back and really look at the big picture and see these dynamics. Miles has a huge list of challenges already. So does the Board but I think it would do us well to do that.

CHAIR RICHARDSON: Thank you. Additional questions for Michael? Thank you very much. We much appreciate your comments.

The Chair notes for the record that Zea Sonnabend has been able to arrive here from California. She rode here on a horse, I think, as far as I can tell. We are pleased to see her. It is 12:30 on the record, she is able to be at our meeting.

Michelle, could you update me on the status of Harold? He is on the phone connection, is that right, rather than visual at the present time?

MS. ARSENAULT: We have him Skyped-in.

CHAIR RICHARDSON: Okay, thank you. So, the record reflects he is able to be hearing the public comment, which will be formulating part of his information as he votes later on this week.
The next speaker is Aaron Avila and he will be followed by Harry Rice. Aaron.

MR. AVILA: Thank you. Aaron Avila. I work for G.S. Long Company, a family-owned consulting supply company located in the Pacific Northwest. We work directly with certified organic and conventional growers of tree fruit, hops, wine, grapes, and berries, both large and small, and have for over 30 years. Our crop advisors consult on approximately 7,000 acres of certified production and over 2,000 acres currently in transition to organic.

I have worked in Washington agriculture for 25 years and also currently serve as Vice Chair of the WSDA Organic Advisory Board.

In the interest of time, I am only commenting on materials that I consider most important to our growers. My lack of comments and other materials scheduled for sunset should not imply my agreement or encouragement of such action. I ask that you please also reference my full written comments submitted for the April meeting.
Chlorine is a necessary sanitation tool across all industry. By sanitizing cutting tools, this is used as a mechanism to prevent cross-contamination of bacteria and fruit production, such as fire blight. Additionally, it supports sustainable water management by providing algae control and micro emitter and drip irrigation systems. Elemental sulfur is widely used for disease suppression and often is a soil amendment. Helping with suppression of mildew, it is a staple product in organic tree fruit, grape, and hop production. But the prohibition of antibiotics for fire blight control and the continued allowance of lime sulfur is increasingly important. The removal of this product with civilian tree fruit insect and disease programs.

Narrow range horticultural oils are widely used for insect and mildew suppression. They are a very important part of organic tree, fruit, grape, and hop production. As I am not aware of any effective replacement, the loss of this will result in a higher level of pest and
disease pressure throughout the course of the growing season.

Pheromones are a cornerstone of IPM practices and a staple in organic tree fruit production. It would be absurd to remove these important tools. The unavailability of pheromone disruption and pheromone monitoring would lead to a sharp increase in additional pesticide applications and likely cause many to leave the program altogether.

Coppers have always been important to prevent bacterial infections in tree fruit and with the removal of antibiotics for fire blight control, even worse than now.

Potassium bicarbonate is used as a mildew eradicant and other than sulfur, I am not aware of any other compound that can help post-infection, although sulfur can be used as an eradicant, it provides a much higher risk of biotoxicity to the crop.

Micronutrients play an important role in agricultural production as well. There is much
work done in this area. I support their continued
use in organic production, as well as their
proposed amended annotation. Sole deficiency
must be documented, period.

List for inerts seems prudent to allow
EPA safer choice to continue and finalize the
review process before taking a position. Should
this review result in the removal of those four
inerts, two years is not nearly enough time for
product manufacturers to change formulations
because changes in formulations would likely also
require new environmental impact and efficacy
studies as well a time to educate producers. I
believe a five-year period is more realistic.

And in closing, I would also like to say
that I think the notion that ideals surrounding
organic agriculture are somehow tied to scale of
operations are false and that these products are
important to the continued success of the certified
organic industry both large and small. Thank you
for the opportunity to be here today and to share
these comments with you.
CHAIR RICHARDSON: Thank you very much Aaron. Questions for Aaron on this presentation. Any questions for him? No, no questions. Thank you very much. We much appreciated your comments.

The next speaker is Harry Rice and he will be followed by Mark Kastel. Harry.

MR. RICE: My name is Harry Rice and I represent the Global Organization for EPA and DHA Omega-3s. I will address the relisting of fish oil on the National List.

Allegations that the fish oil industry is wreaking havoc on the environment, as well as allegations that fish oil is harmful and of no benefit to human health are unfounded.

Comments concerning sustainability were included in GOED's written comments but I have the following to add. Contrary to what is reported in the fish oil technical report, fish are not fish solely for their fish oil. Fish oil is a value-added byproduct. The 2015 dietary guidelines advisory committee examines sustainability of fish production. From the
scientific report, I quote the following conclusion from Part D, Chapter 5. The DGAC concurs with the FAO report that consistent evidence demonstrates the capture fisheries increasingly managed in a sustainable way have remained stable over several decades. However, on average, capture fisheries are fully exploited and their continuing productivity relies on careful management to avoid over exploitation and long-term collapse.

The DGAC rated this evidence as strong. Contrary to popular belief, this is a positive conclusion.

For many, the word exploit has a negative connotation. In describing the state of fisheries, exploit is not considered negative until we talk about being over-exploited. FAO defines fully exploited to mean the following, and I quote, the fishery is operating at or close to an optimal yield level, with no expected room for further expansion.

According to the most recent report of
the sustainable fisheries partnership, the fisheries that supply 85 percent of omega-3 oils just received a rating of E or higher and that is on a scale from A to F. Of course, improvement can continue to be made in all fisheries and these rankings are an important part of the process.

With respect to contaminants, during the fish oil refining process, the level of contaminants present is reduced to levels much lower than in the fish. According to the 2015 DGAC, the majority of wild caught species neither the risks of mercury nor organic pollutants outweigh the health benefits of seafood consumption. The 2014 draft updated seafood advice from the FDA and EPA, as well as the associated risk assessment report that the benefits of fish consumption outweigh any potential risks. Since the level of contaminants in fish is of little concern, the level of contaminants in fish oil should be of even less concern.

With respect to plant-derived
alternatives, as expressed in GOED's written comments, plan-based sources of omega-3s serve as an inadequate alternative to marine-based omega-3s.

With respect to human health, some of the public comments I have reviewed refer to a New York Times article published last spring, which question the well-substantiated cardiovascular benefits of fish oil. Unfortunately, the writer of the article relied upon a poorly-substantiated letter, not a peer reviewed article, published in JAMA as the basis of the article.

In conclusion, GOED encourages the NOSB to retain fish oil on the list of nonorganically produced agricultural products allowed as ingredients in products labeled as organic. Please do not ever hesitate to contact GOED with any questions related to fish oil or any other EPA DHA product. We are always happy to share our expertise. Thank you for your time.

CHAIR RICHARDSON: Thank you, Harry.

Questions? Tom.
MEMBER CHAPMAN: How do your monograph limits of PVC dioxin heavy metals compared to national, foreign, or international standards on tolerable consumptions of those substances?

MR. RICE: So, I don't think you are asking for exact figures.

Okay, so in general what happens is we look at all the strictest regulations around the world. We have compiled, I guess, a large database or spreadsheet and we set our limits at the strictest limits around the world.

So, for PVCs, the State of California has the strictest limit. So, that is how we do it.

CHAIR RICHARDSON: Question from the Chair, if I may.

The technical report that we received on fish oil included that some of the fish oil was coming actually from mammals, from seals and whales. To what extent do you know whether that is true and what percentage that might be in the fish oil supply that you are involved with?

MR. RICE: Yes, so I can't give you an
exact percentage. We don't have any numbers that deal in that area. I can tell you that we have estimated that our membership encompasses 85 percent plus of the world's manufacturing and refineries. So, it would be a very small percent.

CHAIR RICHARDSON: And a follow-up. One of the commenters stated that 81 percent of all the world's fish oil is actually used in aquaculture. Does your company get involved with that at all or are you involved only in the refined fish oil that is used for human consumption?

MR. RICE: The majority of it is refined for human consumption. So, very few of our members are involved in aquaculture.

CHAIR RICHARDSON: Thank you. Questions from the Board? Thank you very much.

MR. RICHE: Thank you.

CHAIR RICHARDSON: The next speaker is Mark Kastel and he will be followed by Julia Barton.

MR. KASTEL: Thank you, Madam Chair. My name is Mark Kastel. I am here today representing the Cornucopia Institute and our approximately
10,000 members. Certified organic farmers are our primary constituency.

Mark Twain once said loyalty to country always; loyalty to the government, when it deserves it.

Mark Kastel once said loyalty to organics always; loyalty to the NOP when it deserves it.

We have wondered why there is not more outrage on the part of people appointed to this Board. We just released Cornucopia's updated voting scorecard. We have been accused by one political appointee on this Board of bullying and intimidating. For heaven's sakes, people, all of our research is based on public records. Radical Cornucopia policy positions on all contested votes on the scorecard were 100 percent in concert with Food and Water Watch, Beyond Pesticides, Center for Food Safety, Consumers Union, OCA, and other NGOs -- 100 percent. Radical.

According the votes on the record, the majority of the Board at the last meeting voted with
the industry lobbyists between 9 and 33 percent.

Look at the slides. Have you ever seen an organic farm before? When we paid for our unannounced aerial surveillance, not one egg-laying operation had any chickens outside. The one broiler operations with 40 barns, 20,000 to 30,000 birds in a barn, had not one chicken outdoors.

Access to pasture? Of the dairies we flew over, managing as many as 18,000 head of cattle, somewhere between zero and 10 percent of their animals were outside of the feed lots when we flew over. Organic.

Let's applaud the NOP and its leadership. It's legacy so far, according to recent USDA research, fewer farmers and fewer organic agri. Why? CAFOs are producing half of the organic milk today, likely. Seven organic dairy farms in Texas produced more milk than the hundreds of family farmers in Wisconsin, hundreds. Eighty to ninety percent of the organic eggs, according to the United Egg Producers Lobby, come from giant CAFOs.
An estimated 80 to 90 percent of organic soybeans are imported from countries like China and India. About 50 percent of the corn that is flooding the market is from mostly former Soviet bloc states. We trust these folks.

We received a phone call last week from one of the farmer-owned organic grain cooperatives. They literally cannot sell 2015 crop in corn and wheat. The market is flooded from Romania and elsewhere.

Is everyone on this board 100 percent confident that 100 percent of all those commodities, those shiploads coming to the U.S. is really organic?

Thank you very much.

CHAIR RICHARDSON: Thank you, Mark. Questions? Yes, Jennifer.

MEMBER TAYLOR: Thank you so much for all that you are doing and all of the support of the organic community as well.

So, as you view and report the information that you are reporting, what do you
think the National Organic Standards Board can do -- or the National Organic Program?

MR. KASTEL: Well, the first thing -- and thank you for the question. From a Board member who was appointed to recommend consumers, right, the first thing we can do is have the USDA respect the Organic Foods Production Act so when they set aside Board seats that are reserved for someone who quote owns or operates an organic farm, that they are truly working farmers with skin in the game.

And then, this is not a scientific panel, obviously. There is one seat designated for a scientist. It is a lay panel to interpret what is best for the organic community through your prism, through the OFPA prism.

So, the Congress gave the authority to this Board, not to the NOP, to choose technical advisors, scientists, that you feel comfortable with, that you feel are qualified to do this analysis. Because you folks aren't qualified. We have a couple Ph.Ds. at Cornucopia. I'm not
qualified to make many of these calls.

But you are not able to choose them yourself. The bureaucrats at the USDA are choosing them for you. It is just like Cornucopia's Board choosing the auditors. The job of the auditors for a nonprofit or a public corporation is to make sure the management is doing the right thing ethically.

So, you folks need to choose to make sure, one, that the scientists are qualified, and two, that they don't have conflicts of interest. In the past, some of these technical and TAP reviewers have worked for agribusinesses that have advocated or used some of these materials. That is a conflict of interest. That is in our organic Watergate report.

How come we can't do that scrutiny now to assure there is no conflict of interest? How come this Board can't? Because the program is keeping the identities of the technical reviewers, the scientists, secret. Has anyone ever heard of a scientific paper published in any journal or
anywhere else where the authors were anonymous?

So, those two factors could be game changers in terms of the work of this board in assuring to the public that the organic foods protection act is properly executed.

CHAIR RICHARDSON: Thank you, Mark.

MEMBER TAYLOR: Thank you.

CHAIR RICHARDSON: Other questions?

So, Board Chair prerogative, if I may. I know you mentioned that you're a 10,000 member, non-profit right?

MR. KASTEL: That is correct.

CHAIR RICHARDSON: So, you technically have -- it is a nonprofit organization with 10,000 actual members. This is member under the IRS.

MR. KASTEL: These are people who paid dues to -- well, I shouldn't say -- dues is a tricky word. These are people who have made some kind of financial commitment to become members. We have no minimum contribution. We have farmers that have given $30 a year; some less; and God bless them, some might give $1,000.
CHAIR RICHARDSON: So, it is a membership organization as defined under the IRS code?

MR. KASTEL: We have bylaws to define our classes of members and we are governed by our Board of Directors.

CHAIR RICHARDSON: Great. Thank you very much, Mark, for your presentation.

MR. KASTEL: Thank you, Madam Chair.

CHAIR RICHARDSON: It is appreciated.

The next speaker is Julia Barton and she will be followed by Lisa Bunin.

MS. BARTON: Good morning. The Ohio Ecological Food and Farm Association or OEFFA, is a grassroots coalition of more than 3800 members who work to build a healthy and sustainable food system. We employ education, advocacy, and grass roots organizing to promote local and organic food. Our certification programs certifies over 950 organic producers and handlers.

The organic community has a track record of working together to overcome challenges.
While we submitted written comments on several topics, there are two key challenges we wanted to highlight with you today. Our hope is that there is space in this forum for the discussion of these issues. The first has to do with GMOs. Come time ago, while training new staff, it came to our attention that the NOP guide for organic crop producers states that GMOCs may be used during transition. At first, we thought this was a mistake but later came to the understanding that it stems from the specific interpretation of GMOs as a prohibited method, rather than a prohibited substance, particularly at a time when organic producers are bearing the weight and economic hardship of preventative measures against GE contamination, we must have clarity on our approach to this issue. The allowance of GE seed during transition sends mixed signals to transitioning producers, contradicts widely held understandings of the rule and has the potential to damage consumer confidence. 

Allowing this practice complicates the
Certification process, as it is difficult to verify that GE plants do not grow the following year, potentially contaminating organic crops. It does not serve the interests of transitioning or organic producers. We specifically request a clarifying statement that GE seed be prohibited during transition to organic.

The second challenge has to do with hydraulic fracturing. Farms in the 14 states in which we certify are in proximity to fracking wells, injection wells, and pipelines with more plans for construction. We are concerned about the impacts of these wells and pipelines on organic producer's businesses, and on the integrity of the food being produced under the organic label.

Dr. Ted Auch from Cleveland State University recently examined these issues. Key findings of his include 11 percent of U.S. organic farms are within oil and gas regions of concern. This has the potential to increase to 15 to 30 percent if more shale plays and basins are exploited.
Sixty to seventy-four percent of these farms produce crops and seeds like California, Ohio, Michigan, Pennsylvania, and Texas. Issues such as soil quality, watershed resilience and water rights are likely to worsen over time with additional drilling. This raises important questions for the organic community, such as how can we address related concerns with air or water pollution, water reuse systems, irrigation and runoff.

We respectfully request the clarifying statement that fracking wastewater containing prohibited substances cannot be used as irrigation water in organic systems. And we thank you for your service.

CHAIR RICHARDSON: Thank you very much, Julia. Comments from -- yes, Francis.

MEMBER THICKE: Thank for pointing that out about GMOs being allowed at transition. And I understand. I looked it up. It is not what is in here, the ATRA publication. And talking to Emily, that is a mistake, I understand. Maybe
someone could clarify that from the program.

CHAIR RICHARDSON: I'm sorry. I'm not following, Francis.

MEMBER THICKE: Okay, I'm sorry. She referred to something in the crop production handbook which was prepared by ATRA and it says that GMOs are allowed during transition, which is a mistake, I believe. And maybe somebody could clear that up.

MS. BARTON: My understanding was that that was in the NOP publication. Is that not correct?

MEMBER THICKE: It was prepared by ATRA.

MR. MCEVOY: Yes, it is in a publication that is referenced on our website and it is a mistake that we have been meaning to revise. Yes.

MS. BARTON: Thank you. That is great news.

CHAIR RICHARDSON: Thank you. Questions, Board members?
Thank you very much.

MR. MCEVOY: I think we may want to talk about the fracking information that we have found out. Emily, do you want to clarify that?

MS. BROWN ROSEN: Hi. I have looked into the fracking issue a little bit and we are certainly looking for more information on this topic and we have consulted with EPA as to the use of fracking wastewater and irrigation. Basically, there is two different kinds of water that is classified by EPA and the Bureau of the Interior, fracking water from injected water into wells that has all those, well a lot of synthetic chemicals and is often contaminated; and then there is what is called produced water, which is a byproduct of oil and gas drilling.

And fracking water right now is not really -- well, some states prohibit it outright for irrigation and EPA has a proposed rule out to prohibit it outright for irrigation for all uses. So, that is under development and it is also not supposed to be going into public treatment water
programs, municipal treatment water.

The only exception is an onshore disposal of wastewater from oil and gas drilling is not supposed to be used on shore, except for in the arid west, there is an exception to use it west of the 98th meridian. So, that is where there has been some concern about the waste water from oil and gas drilling being used in specific water districts in California.

So, we are still looking into this. We have limited authority under OFPA to regulate water but certainly, it is an issue of concern and we will welcome more information as we consult with the different authorities about it.

MS. BARTON: Is this an issue that the NOSB has purview in or is this not something for their discussion? It is just it is not always clear to me where the line is there.

MR. MCEVOY: This is one of the topics that we have had some preliminary talks with the NOSB about putting it on their work agenda for further exploration and see if there is further
work that needs to happen on irrigation waters abroad topic.

MS. BARTON: Thank you.

CHAIR RICHARDSON: Thank you very much for your timely comments. I know there is a lot of activity going on with this nationwide.

What I am going to do is just have Lisa Bunin speak. And Albert, would you be comfortable waiting to be the first one after lunch? Because I hate to keep those demonstrators waiting.

So, Lisa. Lisa Bunin. Thank you.

MS. BUNIN: Good afternoon. My name is Lisa Bunin. I am the Senior Organic Policy Director at Center for Food Safety.

When Congress passed OFPA, participants in early conversations about how to put organic values, principles, and practices into law, understood it wouldn't be perfect. It couldn't be because the organic sector was still evolving. But OFPAs premise was that it would continuously improve as organic grew.

Still, skepticism and discontentment
prevailed regarding federal regulation of organic. UACA had little understanding of organic agriculture and little desire to support a system that issued agrochemicals. The Secretary of Agriculture actually testified in Congress against housing organic in USDA. So, when USDA took over organic, it pigeonholed it as a market niche within AMS.

Organic pioneers viewed organic differently. They viewed it as a transformational agricultural system and demanded checks and balances in OFPA to protect its integrity. This ensured that the control of organic development was not taken out of their hands or evolved into a weak specialty market, instead of a regenerative foods system that they envisioned. Pioneers insisted that OFPA create a stakeholder board, the NOSB, with the authority to uphold organic principles.

Given continuous improvement and expectations, OFPA added EPA's list of synthetic inerts of non-toxicological concerns of the first National List. Twenty-five years later, with
EPA's inert list dissolved, the Board's Review Committee substantially improved, the NOSB must revisit inerts. It already screams active ingredients in pesticides used in organic but inerts comprise 90 percent or more of pesticides and they may be more hazardous components. EPA's pesticide registration does not ensure OFPA's compliance because it is based upon different and often incompatible standards.

CFS supports the NOSB's plan to review inerts in clusters of related chemicals. We oppose substituting alone EPA's safer ingredient list without NOSB review.

NOP should not ask NOSB to reconsider bio-based, biodegradable mulch. Unfortunately, so many farmers depends on plastic mulch to suppress weeds, creating mounds of plastic waste but it would be worse to weaken standards to allow petrochemical-based feedstock in mulch that is supposed to decompose in organic fields and this would violate OFPA.

Increasing farm fertility, farm soil
fertility, and biodiversity is a foundational practice of organic. Some soilless hydroponic systems reduce the ecological complexity of crop production to a feeding system of required nutrients. This doesn't fit the definition of organic production. While some may see it as we are certifying the system without legally established rules, others are not because they don't believe that hydroponics can be organic.

Certification inconsistencies violate OFPA, create consumer confusion and reflect poorly on organic. We urge NOP to issue a moratorium on new certifications and draft constructions to certifiers consistent with the legal definition of organic production with the NOSB's 2010 recommendations leading to rulemaking.

Thank you and thank you to the outgoing members for their service.

CHAIR RICHARDSON: Oh, you finished on time. You get the award, Jean's magic wand.

All right, questions for Lisa. Yes, Colehour.
MEMBER BONDERA: Okay, thank you, Lisa, for your comments. And my question, perhaps, isn't exactly something that you talked about but you referred to, which is, and I am the lead person on the plastic mulch and covers material that we are going to be voting on regarding, I guess, de-listing. But at this point in time, nobody was encouraging de-listing it and you made a comment in what you said regarding how biodegradable mulches, I think what I heard you say quite quickly was that we shouldn't be revisiting that topic and you made some comment about how it doesn't -- what is being pursued with that doesn't meet OFPA criteria.

And my question is, regarding the current material that is listed, plastic mulch and covers in 205.601(b), does that one meet the OFPA criteria and should be relisted? So, I would like you to address that question regarding what is currently on the books and, according to this system, will probably be relisted. Thank you.

MS. BUNIN: That is a very tough
question. Of course we understand that farmers are using it quite regularly and what I would say is that the research needs to go on to the research agenda and alternatives really should be found. I wouldn't say that would be a substance that should stay on the list for the long-term but, in the short-term, I think all hell would break loose if it were to be removed from the list without viable substitutes at this point in time, unfortunately.

CHAIR RICHARDSON: Thank you. Other questions for Lisa?

Hearing none, I would like to invite all of you to go outside into the parking lot, right outside the entrance to the conference center, where there is a demonstration in support of the NOSB and its stance on hydroponics. And we will reconvene here at exactly 2:15.

(Whereupon, the above-entitled matter went off the record at 12:58 p.m. and resumed at 2:21 p.m.)

CHAIR RICHARDSON: Ladies and
gentlemen, if we could get started. We do have an 
afternoon of public comments that we will be going 
through until 6:30 this afternoon, with one break. 
So, I would appreciate it if everybody could please 
take their seats now so we could get back on the 
record. Look at that middle-aged chicken crossing 
the road. Yes, we saw that.

It is 25 minutes past. So, we are five 
minutes later than I thought we might be. So, I 
know that I have Albert Straus up there all about 
raring to go. And I just have to step out and go 
and do a couple of things for five minutes or ten 
minutes or so. But Tracy is taking over as chair, 
so you will be up here, Albert. And so Tracy will 
be then, as Vice Chair, taking over for a few 
minutes and I will be back as soon as I can.

Go ahead.

MR. STRAUS: Thank for the opportunity 
to speak today. My name is Albert Straus. I am 
the founder of Straus Family Creamery. I grew up 
on my family dairy farm and I have personally 
managed it for almost 40 years and converted to
I am here today to share my perspectives as a farmer who has a keen interest in upholding organic integrity. It is critical that we preserve consumer confidence in the organic label. Since the organic pasture rule has been adopted, the consistent implementation, oversight, and enforcement of the rule has been problematic. A key component of organic milk production is that cows must spend at least 120 days on pasture and must obtain at least 30 percent of their dry matter intake from pasture during the grazing season.

In order to achieve that standard, a minimum number of acres is required for each cow to have adequate pasture to graze on. The calculation will vary by geographical regions but, in our area of coastal marine counties, the rule of thumb is one acre per milking cow.

When organic dairy operations are certified with cows per acre ratios that far exceed that number, that rule of thumb, we question whether organic standards are truly being upheld.
Not only are these farms not meeting the requirements to be organic, they are potentially eroding consumers' confidence in the organic label.

I am here to ask for stricter oversight by certifiers in evaluation of organic system plans and practices on organic dairies. In order to maintain consumers' trust, certifiers everywhere should ensure that they are checking the number of cows per acre reported against the reality of the pasture grown that is possible in that region. The onus should be on the certifier to critically evaluate this data and not just accept it at face value. Additionally, I would ask that the NOP audit certifiers to make sure that their evaluations are accurate and in compliance with the organic pasture rule.

Another subject I would like to talk to you about is about conventional spent brewer's yeast. The NOP allows yeast from nonorganic sources be used as part of the feed rations for organic livestock. In the NOP guidance on yeast
data July 22, 2011, this yeast is approved for use as a supplement without a clear definition of any limitations on that amount.

The yeast has the potential -- I have just a couple sentences.

VICE CHAIR FAVRE: Yes, go ahead and finish.

MR. STRAUS: The yeast has the potential to take the place of organic protein feeds. The certifier, MOCA, and CCOF have come out with a guidance interpretation that states if this operation is feeding on organic yeast greater than one percent of the ration, they must justify why it is a feed supplement and not a feed ingredient in the ration. I believe in this guidance and believe that the national regulations should reflect this policy, in order to maintain consumer confidence in the integrity of organic dairy products. Thank you.


MEMBER BONDERA: Thank you for your
My question is is there anything concrete that you could suggest or saying in what you said that the NOSB could take as action?

MR. STRAUS: On which subject?

MEMBER BONDERA: I almost -- I mean from what I heard, it seemed like most of what you were saying was certifiers, or enforcement, or the NOP. But I am just wondering.

MR. STRAUS: So, as far as the pasture, I think it is a matter of getting the certifiers to understand how to evaluate pasture. And when you have four plus cows per acre, when everybody else has to have about one cow per acre, it causes questions by not only the community but also consumers.

As far as the brewer's yeast, the spent brewer's yeast, that is something that I think is a loophole that needs to be tightened up. Yeast was meant to be a digestive aid or helps something in the rumen for livestock. But it has the potential of being a protein feed and some people
are feeding 10 to 15 percent of their ration with this conventional feed.

VICE CHAIR FAVRE: Francis.

MEMBER THICKE: Thank you, Albert. In your region, do you think there are many dairies that are less one acre per cow of grazing area?

MR. STRAUS: Less meaning?

MEMBER THICKE: Fewer acres per cow.

MR. STRAUS: There is a handful, yes. And there is a lot of questions being asked around. And I know there is a complaint procedure but I don't know if anybody is really willing to go out on a limb and talk about their neighbors.

VICE CHAIR FAVRE: Any other questions? Well, I will ask one real quick.

Would you allow us how maybe how different grazing methods have something to do with the capacity of a pasture to carry more animals, like a rotational grazing?

MR. STRAUS: Rotational grazing can help a little bit but, even so, in our area, one to two maybe cows per acre would be realistic. But
when you get three, four, or five cows per acre, it is not realistic without irrigation or any other type of way to extend it.

VICE CHAIR FAVRE: Thank you.

MR. STRAUS: Thank you.

VICE CHAIR FAVRE: Next up is Steve Wisbaum. On deck is Dave Miskell.

MR. WISBAUM: Good afternoon. My comments concern two related issues, the diminishing integrity of the organic label and hydroponic production.

I have been purchasing and growing organic food for over 40 years and I am also a long-time supporter of NOFA-Vermont, The Cornucopia Institute and the Organic Consumers Association.

In the early '90s, I worked as an organic inspector for a variety of certifiers throughout the U.S. During this time, I helped write the first IOAIA inspection manuals, uncovered one of the first organic fraud cases to be prosecuted by a state's attorney general, and
initiated an IOIA survey of organic inspectors on issues related to organic integrity. I also wrote and distributed a paper called strengthening the organic certification system, which outlined the steps that could be taken by organic certifiers in the NOP to detect and prevent organic fraud.

Over time, I came to the conclusion that most people within the organic community either simply didn't know enough about the details of the certification and inspection process to understand how easy it is to game the system or were simply choosing to ignore the problem either to protect their own limited self-interest or because they feared the bad press that could come with full transparency on this issue.

And while the NOP has obviously made some improvements in their oversight of the organic certification system over these past 25 years, it is my sense that there still exists a significant amount of organic fraud, especially related to the sale of fraudulently labeled conventional products by certified organic producers and processors.
I also believe that this fraud is continuing to place certain segments of the organic industry at a significant competitive disadvantage and is one of the main reasons that we are seeing a steady decline in the number of organic farms in the U.S., at least outside of Vermont.

A number of recent NOP actions have further undermined my confidence in the integrity of the organic label, including the NOP's continued support of the certification of CAFOs that violate the core organic principles of animals spending a large portion of their time in healthy green pastures. The NOP's change of the sunset rule that reduced the incentive to find safer alternatives to the materials on the national list, the shift in the composition of the NOSB which will likely result in serving corporate business interests at the expense of the interest of consumers and small family farmers.

And finally, the NOP allowance of the certification of hydroponic tomato operations, in spite of the long-held foundational tradition of
organic vegetable production they have done in a healthy soil ecosystem and in direct opposition to the NOSB's recommendation on this issue.

Thank you for your work on this committee and providing me with the opportunity to share my views.


Okay, we have got David Miskell and Jane Shey is up next.

MR. MISKELL: I have an organic greenhouse greens business in Charlotte, Vermont. I have been farming organically since 1972. I was a member of the Vermont -- we formed the Vermont Organic Farmers Certification Program, and I am still certified by Vermont Organic Farmers.

When the move towards national standards came about, my first response was oh, we are letting the fox into the chicken house and the fox is hungry. And I was convinced by others amongst the Vermont organic farming community that we have done something really different here that
we have set up a structure called the NOSB and that structure is going to be a community awareness process and a research process to maintain the integrity of the organic standards.

The 2010 recommendations of NOSB I submitted testimony from the very beginning of the NOSB addressing of this hydroponic issue. It took the public input in, came out with a document that reaffirmed that organic farming is totally the heart of is creating living soil that is related to growing the plants, growing the animals, and growing people, and really healing the world. And that has been my mission from day one in organic farming.

The total reluctance of USDA and OP to address the issues that were brought up by the NOSB and allowance of the certifiers, certain certifiers, Vermont Organic Farmers do not certify hydroponic operations, to go out and certify is wrong. It is a total disrespect of all the work that you as volunteers do at NOSB. It was just what I feared was going to happen. Money talks. The
public stays below the money talks.

What I am working on now, and Dave Chapman and I have brought this issue up, it is great to see how much enthusiasm -- just one more sentence.

We are going to be working to propose a moratorium on any certification of hydroponic operations in the United States or in Mexico, or in Canada, or wherever they are being exported and being dropped into the market. And that is until the task force meets, comes out with a policy, and it is reviewed by the NOSB and then it is made into a rule so that the public can then make comments on that.

Until then, there should be no certification of hydroponics in the United States.

VICE CHAIR FAVRE: Okay, thank you David. Any questions for David? Thank you.

Next up is Jane Shey and then we have got Jake Lewin.

MS. SHEY: Good afternoon. My name is Jane Shey. I am a policy associate for the Organic
Farming Research Foundation, a national nonprofit. The Organic Farming Research Foundation works to foster the improvement and widespread adoption of organic farming systems.

OFRF cultivates organic research, education, and federal policies that bring more farmers and acreage into production.

In April 2015, NOSB submitted a list of research priorities that would support the organic community. Priorities in this list include plant disease management, soil-building practices, seed purity from GMO research needs, and several livestock topics.

OFRF recently completed the National Survey of Organic Farmers, with more than one thousand farmers from across the U.S. participating, allowing these farmers and ranchers the opportunity to provide input on challenges affecting the organic community.

The survey asked farmers to rate different topics as research priorities. We found that many of the NOSB research priorities mirror
the results of our survey of organic farmers. Preliminary results show soil health is a top priority with about 75 percent of the respondents. Weed management was second, selected by about 67 percent of the respondents.

Other topics commonly rated as high importance for research include fertility management, determining the nutritional quality and health benefits of organic food, insect management, soil conservation, disease management, pollinator health protection, information on economics and marketing, and coping with water management during draught and flooding.

Survey result will be used to update OFRF's national organic research agenda, an important roadmap for the USDA and other research institutions identifying the issues most critical to the success of organic farmers.

We want to thank NOSB for their work in recent years to develop research recommendations. We do encourage NOSB to work to identify research needs more in advance of when NOSB recommendations
are made, so that research can better inform policy decisions or help growers adapt more quickly to changing regulations. OFRF is committed to working with NOSB and USDA as a partner to represent the needs of the organic research community and organic farmers.

The issues we raised in our comments reflect our communication and work with the broader organic community. Thank you for your time and increased attention to research needs to help the organic industry continue to grow, while maintaining the standards necessary to ensure the integrity of the organic certification system.

VICE CHAIR FAVRE: Thank you, Jane. Any questions for Jane? Thank you. Good comments.

Next up is Jake Lewin and then after that, on deck is Junior Yoder.

MR. LEWIN: Hi, everybody. I'm Jake Lewin. I'm the President of CCOF Certification Services. We are the nonprofit certification arm of CCOF, which is, in itself a nonprofit.
I just want to give you some perspective for us, as a certifier, on this process that we all participate in here. We spent a lot of time managing the lists that our clients use for their material list in their OSP and we have a pretty good idea what folks use and can turn the sunset dockets into communication. And, in fact, our principle job is getting written work out of farmers and it is hard. And we tried really hard to get you written work out of framers to inform your deliberations and it is, honestly, quite tough. This is process is not something that is real to them when it is not a hot button issue, as we are seeing, for instance, with the hydroponics. It is strongly felt. But day in, day out materials, people just do not conceive that this is really happening.

And so really for us, we are torn between becoming increasingly shrill about the things on the list or giving you numbers about what people use. And really what I am asking you for is to take the numbers seriously because those are
people with real lives and real businesses who just simply, it might not be sinking in what is at stake.

So, moving on, we are doing GMO testing. We have been doing GMO testing over this last year and we really applaud the prevention strategies document and the evidence of our testing is increasingly showing that what really matters is pushing greater and greater responsibility down the supply chain, meaning that seed purity is going to be increasingly important and something we would really like to see be an integral part of the program long-term. Operations need to start with seeds that are free of GMO contamination, if we are to have any hope of having a lack of GMO contamination further down the line. We see this, at this point, as really the only viable pathway or at least the most important step on any other viable pathway.

I would like to ask the NOSB to take on another work item to advise the Secretary on a labeling issue with the FSIS. FSIS has authority over meat labels and they will not allow organic
products to have a clear and simple non-GMO claim. They really have to use a long GMO sentence that is arbitrary, reductionist, and they can't even use the term GMO, in fact. And I think it is a prime opportunity for this Board to look at that and to perhaps provide the Secretary some guidance on your thinking on that. It has been a challenging problem for us and our members, who are making organic products. And this is ranging from a small minority-owned business, making three meat empanadas and 50 or 60 ranchers.


MEMBER MARAVELL: Jake, what are you finding the most prevalent crops that you are testing for for GMO and which of those crops are you find the most GMO contamination?

MR. LEWIN: In general, our focus has been on livestock feed in the last year because that was where we had the primary access. And so the levels are higher in corn and soy but we have seen some in alfalfa. Principally, the vast majority
of what we see has been quite low, below what could be seen as foreign government's thresholds but a couple have been a little higher than that.

VICE CHAIR FAVRE: Thank you, Jake.

MR. LEWIN: Thank you.

VICE CHAIR FAVRE: Next up is Junior Yoder, followed by Urvashi Rangan.

MR. YODER: Thank you for having me here today. I am here representing a small farmer's-owned co-op. Greenfield Farms has 180 members with 52 family-sized vegetable farmers; four egg producers and 30-some dairy producers.

Personally, we farm 12 acres organic vegetables that are marketed through the co-op and processed organic raw sauerkraut. I am also an organic inspector, thanks to the NOP for helping me with the training here.

I'm here to comment on micro nutrients. Looking at micro nutrients as a whole, I think there is two major functions that we need to look at. The immune functions that, in the plant, and the reproductive functions, looking at the micro
nutrients individually, we know that boron increases the sugar breaks in the plant and the fruit. Copper can prevent lodging and small grains. Zinc can increase water utilization. Manganese is very important for the reproductive system.

And looking at other examples, we have done a lot of research on phosphorous. If you have adequate levels of phosphorous and you have minimal uptake in the plant and you apply zinc, you will help that, increase that phosphorous uptake.

So, while I think it is very important to use sea minerals, compost, humates, intensive cover crops, I also think that it is not economical just to depend on those to increase soil levels to what we need to get our deficient soils up to what we need to grow healthy crops.

We know that clovers can increase the boron levels but it is very -- takes a lot of time to do that. We are currently working with the OSU to do research on micronutrients and the interactions it has on weed management.
I would support the idea of having the rule rewrote to state that a producer needs to demonstrate a verifiable need in order to -- before applying and in order to avoid application and potential toxicity.

VICE CHAIR FAVRE: Thank you. Any questions for Junior? Thank you for coming.

Next up is Urvashi Rangan, followed by Terry Shistar.

MS. RANGAN: Hey, good afternoon everybody. My name is Urvashi Rangan. I am the Executive Director of the Food Safety and Sustainability Center at Consumer Reports.

You know last meeting in La Jolla, we were asked a question about whether we were against organic and I was really surprised after, I don't know, this is my 32nd NOSB meeting being asked that question. And so I wanted to clarify something. I appreciate a lot of your clarifications today about the work we do at Consumer Reports and how we perceive organic.

Our job is not to advocate for any one
thing for the sake of it. Our job is to be honest brokers in the marketplace and help consumers understand how labels add value to the conventional baseline and how they compare to one another.

So, we brought a couple of reports in with us. Beef was the last cover story of the last month, comparing organic beef to conventional beef, as well as grass-fed beef, looking at grass fed and organic, my colleague, Tyler, is going to talk a little bit more about that later, documenting the real scientific benefits of organic production and even more organic and grass fed production.

We also have a label table that compares organic to a bunch of other labels across 20, 25 different sustainability attributes. And Charlotte Vallaeys, as you know, does a lot of that work for us. And this is the kind of in-depth work that we are trying to provide consumers so that they can make more informed decisions.

We have brought copies for all of you in the room of every report we have done. It is
worthwhile taking a look at it to see the kind of work we are doing to really underscore and underpin why sustainable production practices matter. And that is what matters to us is making this marketplace more sustainable and doing that in a true way. And that is why we come here every meeting with our criticisms, with our asks for keeping things to be a very high bar.

Along those lines, we want to talk about the antibiotics issue with poultry and the loophole that still exists at the hatchery and on day one of life. We did receive a letter from Secretary Vilsack and we were happy to hear that he was going to be asking you all to be making a recommendation on that. So, we would appreciate knowing where that is on your priority list and how that issue will be addressed and we look forward to your deliberation on that. Given Tyson has done it, we think organic can do that, too, and get baby chicks that haven't been treated with antibiotics.

We have also filed a complaint on a certain toddler formula and it is related to your
work on methionine, on lutein, on cernitin that has
never gone anywhere with the NOP. And that is your
hard work and your hard deliberation.

And as a result, there are products on
the market, including this infant formula that we
have submitted a complaint about that contain these
ingredients. We would like that to be addressed.
We would like your hard work to be recognized and
we think those things are very important.

Thank you.

VICE CHAIR FAVRE: Thank you, Urvashi.

Any questions for her? Thank you very much.

Next up is Terry Shistar and then we
have got Dave Chapman on deck.

MS. SHISTAR: My name is Terry Shistar
and I am on the Board of Directors of the Beyond
Pesticides. We have a long history of involvement
with organic production. Our roots are in the
problems of agriculture from poisoning of farm
workers to contaminated food, soil, air, and water.
We have promoted the organic model as a solution
to pollution.
We also are concerned about inert ingredients. Most consumers sight avoiding chemical exposure as a reason for choosing organic. Anyone who knows anything about pesticides knows that inert ingredient is code for secret ingredient. Do you know who regulates pesticides? Well now that you know these things, how could you possibly think that organic consumers would find it acceptable to evaluate inert ingredients using only a list developed by EPA and never subjecting inert ingredients used in organic production to a public process?

Since you are all very busy people, you may not have had a chance to look at the proposed list of acceptable inert ingredients I organic production. The safer chemical ingredients lists comprises 725 chemicals, about 92 percent of them synthetic in 14 categories.

Most importantly, the SCIL is not just one list. Chemicals on the list are rated according to hazard; 64.5 percent of them have been verified to be of low concern, based on
experimental and model data; 8.6 are expected to be of low concern, based on data; 26.3 have known hazard issues and are not associated with a low hazard level for all environmental and health endpoints. And 0.5 percent will not be acceptable for use in products that are candidates for the safer choice label and currently labeled products that contain them must reformulate.

Thus, about 27 percent of the SCIL can be expected to meet OFPA criteria. Before approving the proposal that is kind of before you, the NOSB must consider some important issues.

Listing on the SCIL does not require public notice and comment is required for the national list. There is no process proposed for delisting from the SCIL. How much time would formulators have to reformulate? The SCIL process, with its lack of the orderly process provided by regulation, may disrupt markets for products used in organic production. The subcommittee should determine which list for chemicals are on the SCIL and make it public.
New inert ingredients must be reviewed against OFPA criteria, as has always been recommended by the NOSB. The criteria for new listings should be consistent with those for old listings.

And finally, the NOSB should determine how --

VICE CHAIR FAVRE: Go ahead and finish that sentence.

MS. SHISTAR: Okay. The NOSB should determine how a periodic review of a list of 725 and growing can be less onerous than review of a list of 126.

VICE CHAIR FAVRE: Thank you. Questions for Terry? Yes, Colehour.

MEMBER BONDERA: I am trying, Terry, to follow something that you said a few times and I don't know if I quite get it. But expand on what you mean when you say that last sentence you said that you referred to before the list is growing.

MS. SHISTAR: Yes, okay. List 4, which is currently referred to in the National List
is a static list. But the SCIL, which is proposed to be the list of allowable inert ingredients in the proposed annotation is a growing list and more things that are constantly being added to it. It has 725 chemicals on it now but there will be more and more added, and not through a review that you do but through EPA's own process.

Does that answer your question, Colehour?

VICE CHAIR FAVRE: Go ahead.

MEMBER BONDERA: Yes, I guess as a follow-up, can you -- I guess I am trying to wrap my brain around this all but I guess part of my lack of understanding is so if it is on this list and we, the NOSB passed something that allows something that is on that list to be used or be included in something organic, then that is sort of an open -- we are opening a door to something that has no definition or it has their definition?

MS. SHISTAR: Yes, essentially because that list is not under the control of the NOSB, that list is an EPA list that has -- and I showed on that
slide, has 14 different categories. At least now it has 14 categories. And so in some of those categories are active categories like antimicrobials. So anything -- as that proposed annotation goes, anything that is on that list, the SCIL list, is available to be an inert ingredient in a product used in organic production. That is my understanding. And if that is not right, then I think you need to clarify the proposal.

VICE CHAIR FAVRE: Nick.

MEMBER MARAVELL: Yes, this is really a question out of ignorance. The List 4, which is what the NOSB used, I guess, theoretically still continues to use, is not under the NOSB control. Am I correct in that?

MS. SHISTAR: Right, but it is a static list.

MEMBER MARAVELL: Right. I understand it is a static list. Was it always a static list? I mean it has been abandoned by EPA but --

MS. SHISTAR: It has been static since
MEMBER MARAVELL: Right. So, I guess my question is, what was the rationale, originally, for the NOSB and I am sort of looking at Emily here, if she knows, for why the NOSB, at one point in time, adopted List 4 at the EPA, rather than have control over the inert ingredients themselves.

Or is there someone in the audience that --

MS. SHISTAR: Michael Sligh could probably answer that.

MEMBER MARAVELL: -- like Michael that could answer?

Okay, so what Michael said is it was a place to start. I will summarize what he said. It was a place to start but it was not necessarily seen as the end point for how -- in other words, we are trying to get a program up and started and you have got something there and you put it in place and you keep going.

MEMBER SONNABEND: At the time, there was really not even an organized process to do TAP
reviews or TRs together for the active ingredient. And so trying to achieve that for anything that wasn't even disclosed publicly was just impossible. And so we have relied on the EPA.

VICE CHAIR FAVRE: Any other questions for Terry? Thank you, Terry.

Next up is Dave Chapman, followed by Jim Gerritsen.

MR. CHAPMAN: Hello. So, it is time for us to come to a conclusion on the issue of hydroponics and organic. Like the emperor's new clothes, the NOP position relies on our continuing silence, in order to avoid ridicule. The 2010 NOSB recommendation is completely clear in saying that hydroponic production has no place in organic certification. So, soilless growing is simply not in keeping with the basic principles of organic farming.

I believe the Task Force is an attempt to avoid, rather than to act on the recommendation. I believe that most of the people in this room agree with the NOSB recommendation. Most of the organic
farmers in America agree with that recommendation. IFOAM, the National Organic Coalition, Cornucopia, the Organic Trade Association, the Agrarian Elders, the OSGATA and the Vermont Organic Farmers have all issued statements in support of that recommendation. Five hundred organic farmers and over one thousand organic consumers have signed petitions that support that recommendation. The standards of 23 of the 27 member states of the EEU, as well as Japan, New Zealand, and New Mexico support that recommendation.

So, who opposes the 2010 recommendation? The NOP and the hydroponic growers.

Was it ever intended that the NOP would redefine the principles of organic farming? I say no. They are only meant to be the referees ensuring that the organic standards are enforced and kept safe from corrupting economic interests. That is the entire reason that the NOP was created by Congress, to protect the farmers and the consumers from unethical marketing, from tricking
people into buying something they didn't mean to buy. And now the NOP is becoming exactly what they were created to protect us from. Let us stop settling for certified sort of organic.

I have three proposals for the NOP: create an immediate moratorium on certifying hydroponic production until the recommendation can be acted on; act quickly to create a rule that will ban hydroponic growing from organic certification; and connect the hydroponic growers to the USDA Process Verified Program so that they can create a label that will honestly offer what they grow to the American people. Let them be proud of how they grow and not hide it behind the organic label and then let the people make their choices.

I call on Miles, the NOSB, and Senator Leahy, and everyone here to push this issue to a speedy conclusion, keeping the organic standards strong and true.

Thank you.

VICE CHAIR FAVRE: Thank you, Dave.

Questions for Dave? Colehour.
MEMBER BONDERA: Thank you, Dave, for your testimony.

I guess I would like to ask you if you could comment about or speak about your own knowledge or experience with hydroponics, in terms of you do do hydroponics or do you understand it well enough to know that variation that you are referring to of why it shouldn't be organic. I wonder if you could expand on your own background or experience for us.

MR. CHAPMAN: Yes, I didn't mention any of my background because three minutes isn't long.

I have been an organic grower for I think 35 years. I have grown in greenhouses for 28 years or so, always in the soil. I have many close friends and associates who are hydroponic growers. I have had two consultants who were hydroponic growers for many years, teaching me not about soil and fertility but about how to control the climate for growing tomatoes. So, I do have a fair amount of experience with the world of hydroponic vegetable growing.
Did I answer the question, Colehour?

VICE CHAIR FAVRE: Other questions for Dave?

I just wanted to thank you for the rousing demonstration we had earlier today. It was a real treat and we appreciate it.

MR. CHAPMAN: Thank you. Monitors are here to welcome you in their own way.

VICE CHAIR FAVRE: Thank you.

MR. CHAPMAN: Okay, thank you.

VICE CHAIR FAVRE: Next up is Jim Gerritsen, followed by Harriet Behar.

MR. GERRITSEN: Hi, I am Jim Gerritsen. I am an organic farmer in Northern Maine. I have been farming organically for 40 years. I have been certified by MOFGA for 33 years. I served on the MOFGA Certification Committee as a volunteer for 25 years. In addition, our family is long-time members of Cornucopia and I serve on the Advisory Board of Cornucopia.

I am co-founder of Organic Seed Growers and Trade Association and I serve as the President
of OSGTA is the organic community's farmer-run membership trade organization promoting, developing, and protecting the organic seed trade.

What I want to talk about today is another hat that I wear and I was one of those farmers invited to the Agrarian Elders' gathering held at Esalen Institute in Big Sur a couple of years ago in the winter. At that time, and I am circulating this around, the 24 farmers that were there, all of whom had a minimum experience of 30 to 40 years growing organically, the total experience in that group was 800 years of organic farming. At that time, we put together a petition, we sent it to Miles, stating that organic must be soil-based, that hydroponics has no place.

What is astounding to me is there is no lack of clarity on this, yet, we are degrading organic integrity by allowing certified organic label to be applied to hydroponics. It is not right.

I agree with Dave Chapman that there needs to be an immediate moratorium. We need to
maintain organic integrity and that means not allowing hydroponics. What is clear, and I'm going to read this statement for the audience that doesn't have access to it, here is the statement that we circulated in the last week and this was signed by virtually every one of the 24 farmers known as the Agrarian Elders: Soil is the foundation of organic agriculture. We believe organic crop production must always be soil-based. Therefore, crops grown from non-soil-based production systems, such as hydroponics, must never be considered or labeled organic.

So, I think this moratorium needs to happen and I think it needs to happen immediately. I imagine I am going to run out of time but seed purity is something that my organization OSGATA works with on a daily basis. We are seed growers that make our livings from growing organic seed and we have a very serious threat and that is from GMO contamination. And we need USDA to protect the private property rights of organic seed growers and to prevent GE contamination from coming
onto our farms.

VICE CHAIR FAVRE: Thank you, Jim.

Questions for Jim? Calvin.

MEMBER WALKER: Earlier today, a speaker outside mentioned that The Alliance of Hydroponics would be possibly a death nail of organic. This kind of really struck me. I am kind of new to it, to a large degree.

Could you interpret that?

MR. GERRITSEN: Yes. Among our membership in OSGATA and within MOFGA, say within MOFGA we have got 400 certified organic farms, hydroponic production includes tomatoes, lettuce, greens, and peppers. Virtually all of those 400 farmers are growing those crops in the soil, adhering to traditional techniques of organic production. If they are out-competed by nonorganic fraudulent production in hydroponics that is being called organic that is done in giant factories like they are doing marijuana in Colorado, there is now way that family farmers can compete with that. It is going to be a lower
quality product. And to be called organic, when it isn't, it is not fair. And we need fairness of the foundation of integrity in organics.

VICE CHAIR FAVRE: Thank you. Any other questions for Jim? Thank you, Jim.

Next up is Harriet Behar and on deck is Ed Maltby.

MS. BEHAR: I am Harriet Behar with MOSES. On the subject of inerts, I am concerned that this proposal that is before us ties the National Organic Program to an EPA program that may or may not be there for the long-term. We have always experienced this and may or may not retain its current methodology of review for the materials on their list, meaning the Safer Choice Program.

I agree that having the NOSB review every inert for placement on the National List and having these inerts go through the sunset process every five years is neither practical nor necessary to protect organic integrity.

On the other hand, while the Organic Food Production Act does refer to the EPA List 4
as a method of evaluating inerts, there was also
a mandate that all synthetics be reviewed and
approved for use by the NOSB.

And also, what is the process, if there
are materials on this Safer Choice List that do not
meet the Organic Food Production Act criteria of
protection of environmental and human health?

I ask the NOSB to consider adding a
recommended procedure that would include an
opportunity for the public or the NOSB members to
request a TR for synthetic materials that have
issues brought forward that question their
compatibility with the OFPA and then these go
through NOSB review.

So, how to honor these various needs of
organic producers who need materials, workload of
the NOSB, and the Organic Food Production Act?
Another possible solution, rather than accepting
the Safer Choice List, could be for the NOP to
manage the inert list as guidance or instructions
to certifiers with all-natural agricultural and
items used as ingredients on 605(a) and (b), put
in that guidance or instructions and also those taken from the Safer Choice List.

If something gets removed from 605, then it would automatically be removed from that NOP approved inert list. Synthetics that are currently on the Safer Choice List could be reviewed with comment from the public, making the case for what items might need a TR and the remainder would then go on to that NOP approved inert list.

By not having those inerts on the National List, it would not be subject to the sunset merry-go-round and this would not add a significant workload to the NOSB but it would allow for review of the problematic synthetics that we don't want to have in organic.

And lastly, I would say that there is precedent for a moratorium on hydroponics because this was done with organic aquaculture. And so I agree with what David Chapman said as far as the moratorium on hydroponics.

CHAIR RICHARDSON: Thank you, Harriet.
See, I'm back here again. We switched over. Any questions for Harriet? Zea.

MEMBER SONNABEND: Thank you, Harriet. I had a little trouble following it. So, are you suggesting that the SCIL team still do the reviews but then they get administratively managed as NOP guidance? Is that what you are suggesting?

MS. BEHAR: I'm saying that you, the NOSB, would look at that SCIL list and choose the agricultural, natural items on 605(a) and (b). Those would automatically move over to an NOP-managed guidance list.

The remainder of the synthetics would then also be reviewed from you with public comment on which items might have issues. Those that have issues would then be requested to have a TR. The items that didn't have issues could then also move over to the NOP guidance list.

But at any time, there should be a procedure that if there is new information that something could be requested to be reviewed again. So, that list would then have, basically, your...
approval through the NOP and then the NOP could not automatically put things on and off on their own. It would all go through you as the NOSB.

MEMBER SONNABEND: Would not the same purpose be served if the SCIL list had a section dedicated to the organic review of things, which would be just as public and people could still request TRs through the NOSB and we would still review it periodically?

MS. BEHAR: So, you would review their organically approved list? Okay, what about procedures for removing something that is on that list, if some new information comes in?

MEMBER SONNABEND: Yes, I mean the full plan is still to be worked out of that but it seems to me -- I mean it has been our intent not necessarily to allow every active ingredient on the SCIL list and not every single thing that is already on it but to annotate or designate with a specific designation which things were reviewed for organic, either with a symbol, asterisk of some kind, or a separate section, potentially.
MS. BEHAR: So, I would feel comfortable with the NOSB going through that review because over time, right now, we have a certain criteria for the SCIL list that they say. But I don't know that that methodology will be the same in the future. So, again, I would always want the NOSB to be able to look that over.

So, I think that is what you are saying. And so that is better, yes.

CHAIR RICHARDSON: Okay, thank you. Other questions for Harriet? Thanks very much.

The next person to present is Ed Maltby from the Northeast Organic Dairy Producers Association and he will be followed by Karl Hammer from Vermont Compost.

MR. MALTBY: Good afternoon. Ed Maltby from the Northeast Organic Dairy Producers Alliance, not association.

I have been farming for 45 years and I have had a new knee for the last three months and had to walk 400 yards to get a cup of coffee this morning because there was no coffee. Enough of my
troubles.

And I would like to compliment Jean Richardson on her chairmanship and opening the whole process for not only the organic community but specifically related to farmers understanding the process. Thank you, Jean.

Hydroponics, NODPA supports the position that has been put out today and we request that the NOSB reiterate its support for the 2010 position so it no longer is a 2010 position but a 2015 position. That should be quite a simple thing for the Board to do.

On the PPM changes, I may have been reading the wrong part of the docket but I couldn't see where the actual changes were. There is no relationship to the old PPM and the new one. And I think when we do change process, we must do it humanely and in consideration of people but we must also remember the same with certification. Just because a guy is a good guy, he can't be certified. It has to abide by a process.

I remember years ago when Kevin
Englebert couldn't get to meetings was willing to be on the phone and everything else. He was not allowed. So, in setting precedents, we have to look to the future and most FACA meetings are attended by one person or two people, not by this number of people. So, we want to use technology but not be abused by it.

God, time disappears.

Ivermectin we recommend that be sunsetted. Fenbendazole and moxidectin have a five-day withdrawal period. We support the use with veterinary and extra label for the goat and sheep milk because fenbendazole and moxidectin are not allowed for sheep and goats. Lidocaine and procaine, if we look to animal welfare, we need to encourage the use of those. As there is no withdrawal time, we recommend 48 hours as a more realistic withdrawal time, rather than having an absurdly long time that producers usually lie about anyway.

That's it.

CHAIR RICHARDSON: All right. Thanks

MEMBER THICKE:  Thank you, Ed.  In your opinion, do you think that both ivermectin and moxidectin are needed on the list if fenbendazole is also on the list?

MR. MALTBY:  In looking at the use of it, it is for emergency use only.  I think that should be stressed both to farmers and certifiers.  And in looking at the tools that farmers need, we had a divergence of opinion amongst our members.  Some of them wanted to get rid of all of them because they didn't need them and so slowly reducing the number.  That is why taking ivermectin out, which I think was the intent when moxidectin was put on, we are honoring the history and the workers part in NOSB.

Our greatest concern is a lot of consumers see parasiticides the same as antibiotics and we want to be aware of that and also aware of the fact that organic livestock is all about systems.  It is about prevention.  It is about building natural immunity and we should
encourage that, rather than discourage that by the use of easy treatments on an annual basis.

CHAIR RICHARDSON: Thank you. Other questions for Ed? May I ask just a quick one?

On procaine, you just said that you would encourage the use of lidocaine and procaine. A lot of the public comment coming in seemed to suggest that procaine is, essentially, not used in the United States. Are you aware of it, Ed, being much used amongst your farmers? We know that lidocaine is but I haven't found much on the procaine. What did you find?

MR. MALTBY: In the farmers I consulted, then, no but I don't have that access. And our rationale was to encourage the use of that where you haven't got animal welfare standards right now. We are way behind the conventional livestock producers on animal welfare and we are using ground there. So, we don't want to take away these tools. We want them to be used on a regular basis to minimize animal suffering and encourage animal welfare.
CHAIR RICHARDSON: Great. Thank you very much, Ed.

The next speaker is Karl Hammer. And following Karl will be Melody Meyer.

MR. HAMMER: Hello. I operate a business in Montpelier, Vermont called the Vermont Compost company. We have about 500 mostly certified organic farmers who purchase compost and compost-based potting soils from us.

I have been an organic farmer for over 40 years. I was certified by Vermont Organic Farmers first in 1984 and we are currently certified by Vermont Organic Farmers as a compost facility, which includes third-party inspection.

My understanding about organic farming was that soil was an important part of it always. The injunction to feed the soil and the soil would feed the plants directed us to look at the 500 million years of plant surface of the planet interaction that we call soil.

It needs to be understood that hydroponics is a radical departure from that
system. It isn't to say it is bad but it is very, very new and it contravenes half a billion years of technology. And it really should not be certified as organic.


MEMBER SONNABEND: Thank you. Since you are a compost maker, perhaps you are in a unique position to explain this.

The NOSB recommendation in 2010 did not really define hydroponics but said that plants must be grown in a compost-based system. In the field when you see greenhouse growers growing in pots or in grow bag systems, for instance, where the media consists of vermiculite, peat, and maybe compost, how much compost needs to be in there or how much soil for you to call it a compost-based system?

MR. HAMMER: That is a very good question, one that I am not going to be able to provide an adequate answer to.

We frequently make media that are 80 percent compost by weight. We see media that are
5 percent compost by weight. Obviously, those media behave very differently.

And when we say compost, that is another one of those words like love or communism that needs definition. It is very specific to it.

Our understanding of our work, when we say we make potting soils, I would rather say we participate in a mystery. And many of these questions about containers, this could be a very long conversation, obviously, but our intent is to -- let me say that we accept that the mass of our knowledge is dwarfed by the mass of our ignorance and that is where awe and respect for the ancient systems that brought us here.

So, we are trying very hard to mimic and allow the part we don't know into these mixes because there is much more that we don't know about how plants grow and about food or what might constitute food. Emerging science makes that very clear that there is more that we don't know than what we do.

So, you know, a greenhouse indoors all
gets very interesting to try to maintain appropriate and adequate constituents that truly are in sympathy with those ancient growing systems. I don't know if that was an answer.

CHAIR RICHARDSON: Thank you, Karl. And of course you know as once that Hydroponics Task Force gets going, you are going to be called on as an expert to tell us what soil is. So, you are going to have to be prepared to come up with the perfect definition.

MR. HAMMER: I will go home and work on that. Thank you.

CHAIR RICHARDSON: Go home and work on that. All right. Thank you very much, Karl.

The next speaker is Melody Meyer and she will be followed by Liana Hoodes.

MS. MEYER: Hello, members of the Board, NOP. Thank you for allowing me to comment.

Melody Meyer with UNFI. I have actually been in the organic space for longer than there was a regulation. So, I appreciate your hard work. I have got a bunch of things to talk about.
I am going to go a little bit fast. I submitted comments that are a little bit longer for you to review.

Biodegradable mulch is the first subject. As you know, in 2014, NOSB gave the recommendation allowing it and adding it to the National List. That was after extensive farmer comments in October 2012, one of which was a supplier of Albert’s Organics for 25 years, who voluntarily gave up their certification in order to use biodegradable mulch, which is allowed in the EU standards.

However, the memo from the NOP required that it be 100 percent bio-based, which is not currently possible. And I strongly recommend or support this material as an alternative to the plastic mulch that is happening now because it can naturally biodegrade in the fields. I think that is more in line with our OFPA than the plastic.

This request is on the future work plan for the Crop Subcommittee but it is not part of the current recommendations for this meeting, which is
interesting, because we are talking about plastics. So, I would urge you to move that forward. I think that that is a tool that organic farmers need as soon as possible.

Ethylene gas for use in organic pineapple production is my next subject. At UNFI, we sell a lot of fresh pineapples. I actually did a lot of work importing them in my past life.

We are against the motion to eliminate ethylene gas in pineapple production. It is really essential for inducing flowering, which affects many aspects of crop planning, from the cultivation, availability, quality and size of the fruit. De-listing this material would make it financially unfeasible for organic pineapple producers in the tropics to really survive in the market. It would, effectively, drive them out into conventional farming, potentially, and significantly reduce organic acreage in the tropics.

I will remind you also that it is allowed for pineapple flower induction by the EU,
Canada, and Codex. And without this material, if we de-list it, we won't have any more organic upside down cake anymore. So, that is something to consider as well.

And then lastly, eliminating the incentive to convert native ecosystems into organic, in order to gain more information on this issue, I would urge the NOSB to send a letter to NASS requesting the organic certifiers survey they are going to conduct next year includes this question. We need to find out what is really happening, especially in the tropics, if we are going out and cutting down pristine areas just to get over that three-year transition period.

And one last thing, the CDFA. I sit on the COPAC, California Organic Products Advisory Committee, a small version of what you are doing. CDFA is now hosting a GMO pilot, a pilot testing program for GMOs in the State of California. And CDFA just put out a blog post and I urge you to look that up and find out more about what is happening now. Thank you.
CHAIR RICHARDSON: Thank you very much. Questions for Melody. Thank you very much, Melody. I know that you have already submitted written comments, which all of us have read as well.

MS. MEYER: Thank you very much. Thanks for all your hard work.

CHAIR RICHARDSON: Liana Hoodes. And Liana will be followed by David Guest.

MS. HOODES: Good afternoon, all. I am Liana Hoodes and I am speaking today as a citizen not a representative of any organization and I would like that corrected.

As always, I would like to commend you all, both the NOP and the NOSB on the incredible amount and substance of work that you do on an ongoing basis.

It so disheartens me to hear that the workload is nearly too massive and often just plain too difficult. Solutions must be found to address the NOSB workload but that cannot happen by giving up your responsibility laid out in the law. So-called inerts must be individually reviewed by
you, the NOSB. That is your legal responsibility.

I know that you are listening for concrete suggestions to advance your agenda today but I can't help but wonder, as our federal government watches what goes on here, that their answers become you can't review all those toxic inerts, it is just too hard; you can't review all those materials, it is just too much. That is why we must all demand that you and the NOP are given the tools you need to get the job done.

The uniqueness of OFPA in the regulation is the development of the most transparent and safe food and agriculture system. It is imperative that the NOSB retain its authority and ability to review, vote, and place on the National List each synthetic substance used in organic.

No matter what USDA says, organic is not just a marketing label and success is not just measured in sales. I'm guessing that you share my belief in organic as an ecological agriculture system and a healthy food supply, as well as a major
solution to climate change. Now, is the time that our government acknowledge this as well and they provide the resources necessary for you to get your job done and uphold organic integrity.

The problem is not with the NOP. It is with the highest reaches of the federal government, which support a food and agriculture system that is poisoning our health and environment. They are not acknowledging the multiple health and environmental and climate adaptation benefits of organic. We must demand that as a government and as a country, we all get to eat clean food; that as a matter of economic and racial justice, we feed all of our children and ourselves clean, organic food.

All levels of government, not just the NOP, must assist in transforming food and agricultural production and practices to embrace organic. All parts of USDA must bring every ounce of scientific technical expertise to aid you in the review of all materials as thoroughly and as often as needed.
Imagine what farmer's tools could be developed if USDA would spend more than the approximately three percent they spend on organic research right now. And the marketplace would respond by developing even more alternative products, less toxic pesticides, processing aids, nutrients, et cetera, if our U.S. government was on this path for a sustainable food future.

I have attached some details to my comments that go into a little more about how I think that could happen. Thank you very much.

CHAIR RICHARDSON: Thank you, Liana, for your articulate comments. They are much appreciated. Are there any questions from the Board members? Thanks, Liana.

The next speaker is David Guest and he will be followed by Abby Youngblood.

MR. GUEST: Yes, before I start, a little clarification. No one knows me as David Guest. That is my given name but everybody knows me as Jake Guest.

My name is Jake Guest. I live in
Norwich, Vermont. I am an organic farmer. My wife, Liz, and I grow organic vegetables, cover crops, and rotational crops on 60 plus acres on and near the Connecticut River. We also grow organic in-ground greenhouse tomatoes, and other vegetable crops in certified organic greenhouses, totaling approximately 12,000 square feet.

I came here today to offer my comments regarding the NOP's policy of allowing the organic certification of hydroponically grown tomatoes and other greenhouse crops. I come to this meeting not only as an active organic farmer but also as a long-time participant and respected voice in the organic community.

In 1971, I participated in the meeting in Westminster, Vermont that was the founding of the first NOFA, the Natural Organic Farmers Association. I was a founding Board of Directors member and served on that Board for several years. I personally organized the first and many subsequent NOFA soil amendment bulk orders.

I am the past President and current
Board member of Vermont Vegetable and Berry Growers Association. And, incidentally, I personally wrote the first NOFA Organic Standards. They weren't very sophisticated but they were a beginning, part of the beginning of a decades' long process of evolution, refinement, argument, and compromise within the organic community that eventually resulted in the USDA organic standards of today. I have been with this movement a long time and I believe that I, and many other people here, have earned the right to have our opinions seriously considered. It think it is important and necessary that groups and individuals making the decisions that affect these organic standards keep in mind the history of the organic movement and the fundamental assumptions that have always been part of that history. A basic assumption has always been that what is organic starts with the soil. From the very beginning over 40 years ago, the term organic has always implied that relationship to the soil, to real soil, soil that is biologically diverse, in balance, soil that
feeds the plants and feeds us and our animals. Soil that is in fact alive.

It is my belief, and certainly the belief of a vast majority of members of the organic community that the NOP's allowing of the organic certification, of hydroponic crop production is not only an inexplicable rejection of the thoroughly considered recommendations of the NOSB but also a radical departure from the implicit and explicit current and historical understanding of what the term organic actually means. I do not believe that hydroponic growing methods can ever be considered organic.

Furthermore, I believe that the value of the organic label will be cheapened when consumers finally realize that these imported and domestic so-called organic vegetables are actually hydroponically grown. I strongly urge that the NOP no longer allow hydroponically produced crops to be certified as organic. Thank you.

CHAIR RICHARDSON: Thank you very much, Jake. Questions, comments? Thank you for
The next speaker is Abby Youngblood of the National Organic Coalition and she will be followed by Eric Sideman.

MS. YOUNGBLOOD: Good afternoon. My name is Abby Youngblood and I am the Executive Director of the National Organic Coalition. First, I want to thank the NOSB members for the work that you do on behalf of the organic community.

And I want to focus my comments on three issues: genetic contamination, the sunset review process, and lastly, I will discuss ancillary substances and nutrient vitamins and minerals.

We know that genetic contamination has been on the NOSB's radar for many years and we appreciate your work on this issue. Contamination is happening, despite the organic community's best efforts to prevent it and organic farmers are losing out. If we are not able to prevent genetic contamination, it will be impossible to have an organic label that is meaningful and has the trust
of the public. For this reason, we disagree that this issue is outside the purview of the NOP and the NOSB. And we urge the NOSB to continue to communicate directly to the Secretary of Agriculture about the need for mandatory prevention measures on the part of patent holders and users of GE technology.

Secondly, I want to touch briefly on the changes made to the sunset review process in September of 2013. The new process has resulted in confusion for NOSB members and the public. One key problem is that the new process allows subcommittees to vote on materials without these decisions going to the full board. This provision is not consistent with FACA rules or OFPA. So, in order to have a full board vote, subcommittees vote to delist a material, even when they want to keep the material on the National List. This convoluted process undermines the public’s confidence and it needs to be revised.

Lastly, the National Organic Coalition expects that all substances used to make organic
foods have either been produced organically or they have been evaluated and appear on the National List and only individual substances should appear on the National List, not groups of substances.

For these reasons, we urge the NOSB to remove nutrient vitamins and minerals from the National List and we oppose all three proposals on ancillary substances. While we appreciate the Handling Subcommittee's efforts to increase transparency and collect information about the substances currently being used, a blanket approval for substances that have not been evaluated using the OFPA criteria is inappropriate and, in fact, some of the ancillary substances being proposed for approval are known or likely carcinogens.

One of the reasons consumers buy organic foods is to support a food system that does not harm human health in the environment and we must make sure the organic label is transparent and lives up to the standard.

Thank you.

MEMBER BONDERA: Okay, thank you, Abby, for your comments. I actually have a simple question, which is to ask you to expand on your comments regarding sunset because you ended by saying that what has been put forth by NOP that we are trying to implement needs to be revised. And I would like you to address, if you have any concrete suggestions of how that could happen or what it could look like. If you could expand at all on that. Thank you.

MS. YOUNGBLOOD: So, the National Organic Coalition has a white paper on the sunset review process that we put out last year and we can share that with the NOSB but we are advocating that the process be returned to the previous process that was in place. So, two-thirds vote of the full Board in order to keep a material on the National List.

CHAIR RICHARDSON: Thank you. Any other questions, comments for Abby? Great.
Thanks very much, Abby.

The next speaker is Eric Sideman and he will be followed by Ib Hagsten.

MR. SIDEMAN: Glad you made it, Zea. Now, as noted, I am Eric Sideman. I work for the Maine Organic Farmers and Gardeners Association. I have worked for them for 30 years, almost 30 years as their staff scientist. I also served as the scientist on the NOSB from 1997 to 2002.

I have come really with really short comments. They are general comments. I am going to leave the specifics up to you. I don't have to do that anymore. And I also want to note that I am here in the state of Bernie Sanders and so I thought I would take a small swipe at capitalism while I am here. In my time working for MOFGA, I have seen things change and some of them are pretty sad.

When I started working for MOFGA, we had 14 certified growers and every one of them knew the principles of organic farming and they weren't farming for the profit. They were farming because
that is how they wanted to farm, that is how they knew organic farming was meant to be.

Times have changed. We certify someplace between 400 and 500 farms now in the State of Maine. And a good portion of them are farming because the profit or the competitive advantage in the marketplace is better with an organic label. And I now see that there are actually quite a few commodities not only individual farmers but whole commodities who would like to use the organic label.

Miles noted these on the Board this morning and so I won't go into them but I would stay here and talk about some specific examples when I get to them. My concern is that some of these people who want to use the organic label because it may do them better in the marketplace don't know the principles of organic farming.

Organic farming started in the early part of the 20th century in response to poor farming practices. It was not a consumer-driven movement. It was a movement driven by academics and
scientists and farmers. And the reason it was started, it was driven by this response to poor farming practices that led to the depletion of the soil and the shrinking agronomic potential of the farms. It started off being called humus farming and the pioneers incorporated various kinds of practices in their farming that built the soil and protected it from further degradation. These practices included incorporating crop residues into the soil, growing green manures, using livestock manure wisely, composting, things like that.

The USDA and OFPA did a fine job when they wrote this into the Congressional Act OFPA and when they wrote the rule. Especially in the rule, if you look where they place the shall and the may and the must in the rule, it shows that they knew that the principle of organic farming was based about taking care of the soil.

And so I really come here with a very short request and that is that the NOSB and the NOP continue on the high road, that they remember that
the rules don't get changed to match practices in these commodities but it is the other way around, that the commodities either have to match the practices or change their practices to match the practices.

Thank you.

CHAIR RICHARDSON: Thank you, Eric. Questions, comments? Thank you for your excellent and articulate comments, they are much appreciated.

The next speaker is Ib Hagsten and he will be followed by Jay Feldman.

MR. HAGSTEN: Ladies and gentlemen, esteemed members of the National Organic Standards Board, thank you for the hard and thankless work that you do on behalf of the integrity of the organic program.

As Vice Chair of IOIA, International Organic Inspectors Association, I was asked to be here. Reviewing the agenda, I sent a request for input from the Board and received totaling conflicting perspectives on sunset products. So,
now I can empathize with you.

Our perspectives were based on different in-person inspectors yet we expect you to make informed decisions based on conflicting oral and written information. One product was ethylene. One inspector said, let's get rid of it. Yet another said, it is essential for pineapple flowering and there is no alternative.

So, now we have to rely on you, the NOSB members, your best, educated assessment. Use common sense and diligence and you will be okay with most of them and most of us will, too.

Humic acid is an essential component of natural occurring soil organic matter. Although, it is extracted, it is a natural occurring compound. Not all farms need it, yet many soils benefit through soil restoration, improvement mineralization, stimulated plant growth, and having seven times higher water holding capacity than clay, making it key for low water uses.

You are challenged to limit parasiticides and their potential annotations.
Again, our group is divided. One inspector with a certified flock of sheep stated clearly he could not stay in business without ivermectin. I, on the other hand, worked in the 1900s as a practicing parasitologist with fenbendazole, developed and marketed by Hoechst in examining 20,000 fecal samples.

We taught the ag communities to call it a dewormer as the worms in the larvae do the worming. Fenbendazole is a premiere dewormer, as a broader spectrum with the highest efficacy, and it works strictly in the GI tract, where it is placed in suspension, paste or in blocks. And once expelled in the manure, it does not harm the environment.

So, what are you to do, scrap them all? If you do internal and external parasite control, the lifecycle, annotations, they believe the inspectors and the certifiers have to verify. The computer combines, too.

Lastly, comments on ways to improve GM prevention to improve GE purity standards, NOP
guidance and GMO testing by the shareholders most of these admirable in that they are added burdens in a cost replacement on the organic side of agriculture or problems foisted upon us by the scrupulous other side of the USDA conglomerate.

As a person who has a split personality and acts divergently is called, by definition, schizophrenic. So, what is an agency with a split personality called? In summary, thank you NOSB members for what you do.

CHAIR RICHARDSON: Thank you Ib. Are there questions on anything that Ib has brought up?

Francis, did you have -- no, okay.

Thank you very much, Ib.

The next speaker is Jay Feldman and you will be followed by Alesia Bock.

MR. FELDMAN: Good afternoon, everybody. A special shout out and thank you to retiring Board members Calvin, Colehour, Jennifer, Nick, and Mac, I'm sure USDA has a check waiting for you as you walk out the door.

And also the rest of you. Obviously,
the role you play is very important. I think we should be celebrating organic as part of this meeting before we get into the criticism of organic, the continued growth of organic is the solution to the poisoning of people and the environment that is associated with chemical intensive agriculture. However, the success is wholly reliant on public trust in the market.

Therefore, we must ensure that the NOSB's decisions and process adhere to the law in meeting the standards of review in three areas, as you know, adverse effects of the materials, compatibility with organic practices, and essentiality to production. This law and the standards must be nurtured by the leadership of the NOSB, the involvement of the public, and the engagement of USDA. We have gotten here with clear standards and reviews of materials that are subject to public hearing and comment. We must build public trust in the independent review responsibility given to the NOSB by statute, which Senator Leahy referred to this morning in the
These decisions include materials decisions for which we have submitted comments, and I hope you have a chance to look at the Beyond Pesticides comments, process issues that go to the governance of the Board and public opportunity for involvement, as well as the critical emerging and emergent issues that need attention. And you have heard about those GMO contamination through genetic drift, contamination of farm inputs.

So, I would like to spend the rest of my time talking about principles of process. In terms of this meeting, this Board should not be reversing a previous Board decision without substantive justification. The inerts recommendation violates this basic principle. The Board voted unanimously in 2012 and previous to that in 2010 twice to begin a review process of inert ingredients, identified the inerts requiring review, and establish a measured process of review over a five-year period. The NOP published procedures in 2013, albeit without public comment, that prohibits annotations at sunset. Now, we are
told that you are advancing an annotation at the same time as sunset. Where is the petition in that process? That is a process question. The NOSB should not conspire to this failure process and should reject the annotation proposed by the crops committee. It broadens the allowed materials, is reliant an EPA list not subject to public review, and doesn't ensure compliance with OFPA standards.

Thank you.


MEMBER MARAVELL: Jay, did you hear the exchange between Harriet and Zea about relying on the EPA list but having NOSB and NOP input?

MR. FELDMAN: I did hear that.

MEMBER MARAVELL: I don't quite understand all the subtleties in that. What was your takeaway on that exchange?

MR. FELDMAN: Well, the finding of the Board, after laborious conversations of the NOSB was that the Board needed to review independent
materials in accordance with OPFA standards. So, yes, you can rely on other mechanisms, other lists coming from other agencies but, obviously, you to double-check that those standards, the OPFA standards are met.

So, that is the hitch. The current language you have in front of you simply refers to the list. And simply accepting a list, when the statute says materials that are not of toxicologic concern and you have a list of over 700 materials, some of which have toxicologic concern, there is a mismatch there between the standards governing the safer chemicals list and the standards that ensure that the Board creates a list or maintains a list that is not of toxicological concern.

MEMBER MARAVELL: So, do you see a mechanism or a way that the NOP and the NOSB could constructively review the EPA list and then make our decision?

MR. FELDMAN: Yes.

MEMBER MARAVELL: You do?

MR. FELDMAN: Yes, I think the list is
a tool that can be used where it matches up with OFPA. But, as Terry pointed out, there are different categories within that list, which makes it difficult to take, in whole, take that list and basically affirm its allowance under OFPA. That is not feasible. And so I think, again, the language that has been proposed by the Crops Committee would take us away from that process of independent review, which I thought this Board had agreed to, in terms of coming up with a five-year plan, breaking down the list into chemicals that have common mechanism of tox or same chemical family. This has all been discussed. So, this seems like a substantive change to me that doesn't really seem justified in the proposal.

And besides the fact that this is an annotation at sunset, even though it is being called an annotation at the same time as sunset. Do you see the difference there? And that is a very troubling development, given the publication of the Federal Register in 2013 on the new sunset process and lack of annotation.
MEMBER MARAVELL: Does the program have anything --

CHAIR RICHARDSON: One more follow-up and then we will move to Tom.

MEMBER MARAVELL: Does the program have any comment on any of those points?

CHAIR RICHARDSON: Emily, do you want to say anything at this point? No. Yes?

MS. BROWN ROSEN: Sure. I think the point was that the current EPA List 4 is over 800 chemicals and many, many of them are of toxicological concern. I think you would agree to that. That is what has been reviewed and renewed at every sunset for the last ten years.

So, we are trying to move away from that to something better and something more in line with organic principles. So, initially, when we discussed it with EPA and talked about working with them and asking them to help us with the review, they did not have a mechanism. So, then the Board worked forward with the proposals to review and cluster on the committee.
So but then, the change in thinking amount the committee and the inert working group was that the SCIL program came online. It has identified a list of specific ingredients that seem to match up pretty good with the inerts, a lot of categories used as inerts and pesticides. And what's more, their screening methods are extremely rigorous and, in the document, there is a side-by-side comparison of all the screening tests they used which is, I think, even more expensive than the NOC had proposed in the original proposal. So, it seemed like a good match.

The idea, as far as oversight, I mean I think we can fine tune things in this proposal, as far as continuing oversight. But certainly, if some kind of listing to refer as SCIL as added to our list, then NOSB has oversight over that listing every five years at sunset and could choose to do it more frequently, if they wanted. There is nothing saying you can't review sunset items more often than five years to go through and highlight if any problems have come along under the SCIL list.
I mean we still envision petitions being available on inerts and also reference to the inerts of minimal risk, as well, so that the manufacturers have several options, doesn't take away options, and it will be a gradual implementation to work toward a future change that we think would be better than the current List 4, which is still hopelessly out of date.

So, that is the thing. I don't know if I exactly addressed your question but I would be happy to go further.

CHAIR RICHARDSON: Well, this isn't a simple subject by any means at all. I'm sure this isn't the last we have heard about it. So, perhaps we could leave it at that just now and then take it up later when we get into -- we will be discussing it when we get into the voting, I think, some, too.

Okay, I'm sorry. Jennifer, you had one more question. Sorry. My apologies.

MEMBER TAYLOR: It kind of was covered in what Nick said but I did want to hear now in response to what Emily has said, how do you think
we should proceed, with that additional information?

MR. FELDMAN: Well, Emily, I think you would admit there are a lot of coulds and possibilities in your description. And partly I think the problems we are experiencing now is the lack of clarity around the procedures that we use. So, I would feel more comfortable and I think the community would feel more comfortable if we had a clear process in front of us.

For instance, if you know the list has 26 percent materials that have toxic properties, then you put that in a different category of review than you would put the other list. If you know some of the materials haven't been reviewed for essentiality or agronomic practices, you put that in a separate list.

So, it is not as simple as just taking a list in whole and suggesting we could, would, should, may. You can bring it back to sunset. We all know what that means.

Part of the reason we are have this
problem right now is because we created a temporary fix. I think people did believe that List 4 inerts would be reviewed, especially List 4(b) that are known to be toxic but are viewed by EPA as not creating an exposure scenario of concern.

So, given those historical problems, let's get it right. I think we can get it right and there is a lot of leadership on this Board that can move this along in a much more prescribed way that ensures adequate review.

Thank you.

CHAIR RICHARDSON: Okay, great.

Thank you.

Well, we have reached four o'clock, which is our break time. I would like to know is Alesia Bock there and Jim Pierce? Would it be possible for you to wait 15 minutes? Okay.

With that, I would like us to take 15 minutes' break and we will start very promptly at exactly 4:15. Thank you.

(Whereupon, the above-entitled matter went off the record at 4:00 p.m. and resumed at 4:16)
CHAIR RICHARDSON: Okay. Are we ready? Are we ready?

All right, the first speaker in this section is Alesia Bock of AgriSystems Organic Consulting and she will be followed by Jim Pierce.

Alesia, thank you.

MS. BOCK: Thank you. My name is Alesia, as you said, Director of AgriSystems Consulting based out of Columbus, Ohio. Thank you for the opportunity to provide comments today. I am here relaying feedback on behalf of several of my clients who couldn't be here, as well as for myself as a food industry professional and an organic consumer.

First of all, regarding crops, we support the micronutrients annotation change to remove the word by testing, as proposed by the Crops Subcommittee. In addition, we support relisting materials on the 2017 subset crops list, specifically copper sulfate and magnesium sulfate, which are used to adjust input levels in greenhouse
fertilizer applications. And regarding elemental sulfur, we support relisting this material, which is used to address powdery mildew in greenhouse applications.

Secondly, we support the petition to add sodium lactate and potassium lactate as antimicrobial agents for meat and poultry products and we support relisting celery powder as an antimicrobial for meat and poultry products. These antimicrobials are all critical to ensure that natural organic uncured meat is safe for consumers, since not all meat companies can afford to solely use high-pressure pasteurization to process meats.

For handling, we fully support relisting all sanitizers for indirect food contact surface cleaning, as listed in 205.605(b). These materials are critical to ensure that food safety is maintained for organic consumers. Nothing will erode consumer confidence more quickly than a food safety recall.

Finally, regarding the Spring 2015 NOSB
recommendation to add acidified sodium chloride as a pre- and post-teat dip for livestock in 205.603(a), we would ask NOP to act quickly to add this to the list as soon as possible to address animal welfare concerns, due to emerging issues with iodine and NPE.

Thank you for your time.

CHAIR RICHARDSON: Thank you for your comments. Yes, questions from Francis.

MEMBER THICKE: If sodium and potassium lactate are on the list, will celery powder be as needed no the list?

MS. BOCK: Right now, celery powder is used to be able to convert the nitrate. Instead of adding sodium nitrate for curing meats, the only thing that is allowed in natural meat products is to have a natural conversion.

MEMBER THICKE: Right. It is right nitrate but --

MS. BOCK: It is different than the preservative effect of lactate and potassium lactate. Two different things.
MEMBER THICKE: The lactate does provide some keeping with preservation qualities, right?

MS. BOCK: Preservation for once the package is open.

MEMBER THICKE: I'm sorry?

MS. BOCK: Once the packages are open, preservation.

MEMBER THICKE: Oh.

MS. BOCK: So, it is different. So, the celery powder is used to convert nitrate to nitrate but the sodium lactate and potassium lactate are preservation systems to help control listeria.

CAIR RICHARDSON: Francis, did you follow that?

MS. BOCK: Sorry, I might have been speaking fast.

CHAIR RICHARDSON: I didn't quite hear you. You were speaking even faster than I do.

MS. BOCK: Right.

CHAIR RICHARDSON: Any other questions
for Alesia? Thank you very much for your comments. We much appreciate it.

The next speaker is Jim Pierce and he will be followed by Alexis Randolph.

MR. PIERCE: Hello. I am Jim Pierce, speaking to you today as a citizen, a usual suspect standards conservative, materials liberal, tools in the tool box, feeling the burn, card carrying lumper citizen. I'm here to talk to you about deep versus wide organic pineapples, internal parasites, and quality.

Quality is like sex. It is all good and it can always be better. And the improvement of quality on the NOSB and at the NOP deserves an organic metaphoric cigarette.

Preparation of documents, communication for feedback focus on the results of the comments, including the webinar comments has all been stellar. Well done.

Gunnar Rundgren is a usual suspect and author in the EU organic circle, who coined the concept of deep versus wide organic. Deep organic
is the soul, the purity intent that legitimizes and protects the brand, while wide organic is the body. The transition, expansion, and passion, that saves farms and feeds children. These two simplifications are simultaneously synergistic and conflicting and, in a nutshell, it is your job.

The quality of your recommendations this cycle is outstanding but the reality of recommending to delist so many materials is distressing. My concerns were mitigated upon learning that your intent was to relist where comments confirmed the need. That is good, scriptural even. Wherever two or more are gathered to use a material, it shall be relisted, or something like that, if it is compatible with a system of organic farming.

Ethylene gas, though, was proposed for removal because it is primarily needed by large growers. My expertise with pineapples doesn't get much beyond pina coladas but there are 42 written comments in support of relisting ethylene gas, which I hope will carry the day.
Your recommendation to delist two parasiticides, ivermectin and moxidectin, while relisting fenbendazole is right one. As one of the original petitioners, working at the time with organic practicing veterinarians, this is exactly what we intended. Another longer comment would be to justify the use of fenbendazole in organ slaughter stock. So, good for you for beginning that discussion and starting that conversation.

Every iteration at the NOSB leaves a legacy. As this sunset pig moves through the python, your legacy, to your credit, will be tighter scrutiny of the materials, which is good. The result will be a list of higher quality.

When the Pope visited America, he repeatedly told leaders that their underlying ultimate responsibility was to the common good of the people. Mark Kastel said to give loyalty to the NOP when they deserve it. I say keep thinking about quality. It can always be better. Thank you.

CHAIR RICHARDSON: Thank you, Jim.
Questions for Jim? We are going to let you off the hook this time. Thank you very much, Jim.

The next speaker is Alexis Randolph from QAI and she will be followed by Stephen Walker from MOSA.

MS. RANDOLPH: Good afternoon, everyone. My name is Alexis Randolph. I am the technical manager at QAI, an organic certification agency. Today, I will be sharing with you some organic system plan information that QAI requires so that the Board can learn a little bit about what organic farmers and handlers must do before using materials currently on the National List.

This is a question from our producer application about soil fertility and crop nutrient management. We stress that soil fertility and nutrients must be managed through the use of crop rotations, covered crops, the application of plant or animal materials and inspectors verify these practices are being utilized to ensure the farmer is not merely relying on inputs. We also inquire about the effectiveness of the fertility
management program and how the producer is monitoring it, which may include soil or tissue testing, visual observations, and comparisons of yield from year to year.

We asked about soil erosion and conservation practices used, such as terracing, waterway management, wind breaks, and interplanting, to name just a few.

Farmers describe their strategies for physical and mechanical pest and weed control, again, to ensure farmers are not reaching for inputs from the National List unnecessarily, as a reaction to problems which could otherwise be resolved. These are just a few questions from a 15-page organic system plan document.

When inputs are used, we include in our review most importantly, the reason for use. The whole system approach to farming is evaluated before any material on the National List is approved by a certifier.

Switching to handlers, they also have to complete a comprehensive organic system plan,
which includes commercial availability search requirements for every material on 205.606 and many on 605. Before using one of these nonorganic ingredients, we require handlers to identify potential suppliers of organic alternatives, describe characteristics of the ingredient, which are essential, explain in detail why the form, quality, or quantity of a potential organic alternative does not work for their product or processing method. Handlers also need to explain how they will continue accepting to find an acceptable organic alternative, including ongoing R&D and contracts to secure the supply chain.

We obtained spec sheets for every nonorganic ingredient used with full ingredient disclosure, including ancillary substances. QAI also thoroughly reviews all nonorganic ingredient materials, such as boiler additives, pest control materials, cleaners, sanitizers to ensure compliance, which includes residue testing as necessary.

QAI submitted written comments about
many of the materials up for 2017 sunset. Most recently, colors. Although numerous colors exist in organic form, the organic petitioner, GNT, confirmed that none are available in powder form. Seventy-three percent of QAI clients using colors are using organic colors, if available. Nonorganic colors are still necessary.

This is the perfect example of how the certification process is working. Many of QAI's clients use materials on the National List as producers, livestock operations, and handlers. By keeping materials on the National List, you allow certifiers to do our job by approving the use of materials within the context of a larger organic system plan.

I would like to thank the Board and the NOP for your hard work and dedication upholding the integrity of organic standards.

CHAIR RICHARDSON: Thank you. Questions for Alexis? Great. Thank you very much. We appreciate it.

I know you have also sent in detailed
written comments which I know we have also read. Thank you very much.

MS. RANDOLPH: Thanks. And thank you, Mac, so much, for representing us. I appreciate it.

CHAIR RICHARDSON: The next speaker is Stephen Walker, to be followed by Bill Wolf.

MR. WALKER: Good afternoon. I am Steve Walker, the Compliance Manager at MOSA Organic Certification. We prepared six written comments plus a table summarizing our certified operations use of sunset materials. My colleague, Jackie DeMinter, touched on most of these during her webinar comment and today, I have thoughts on the excluded methods prevention guidance.

Most of the 1600 operations we certify are in the Midwest, the Bread Basket, and a GMO hot zone. We review many GMO prevention plans and also investigate contamination cases. So, we certainly appreciate the various issues identified and we have got some feedback.

Most of the cited standards refer to
avoidance of contact with prohibited substances. We review plans for GMO contact avoidance but we usually frame GMO use as a prohibited method. The NOP doesn't clearly address incidental GMO contamination. In the Midwest, GMO material is practically everywhere. The proposal indicates certifiers should evaluate practices adequacy to avoid GMO contact. Unfortunately, the strategies can't be expected to prevent all contamination. We encourage enforceable and realistic guidance language.

Here are some thoughts on some of the specific best practices. First, seed used on organic farms must have no detectable GMO contamination but we don't think it is sensible to require producers to test purchased seed. That burden should be on the seed suppliers. For those who rent pollinators, we support guidance to prevent GMO pollen contamination but, with a typical forage radius monitoring feral hives, is impractical and could be misconstrued as encouraging removal of wild bee
Isolating at-risk crops is a good practice but can be impractical. Lack of GMO contamination thresholds means suitable isolation can't be determined. On the other hand, establishing a threshold may hurt a strong organic is non-GMO message. This Catch-22 also effects handlers checking for input contamination. And we wonder if requiring non-GMO handler inputs should extend to ancillary substances. This creates another challenge in balancing practicality with non-GMO messaging. We would like clarification on our role in investigating suspected GMO contamination. Ubiquitous GMO presence may be suspected in many responsible organic operations. Clearly, we investigate suspected GMO use but we need practical guidance on when investigation is warranted.

We appreciate this effort to define best practices in upholding our end of the coexistence effort. These build the necessary message that organic is non-GMO and has many other
benefits. That is the carrot. It is better to teach with kindness. At the same time, Mother Nature carries a big stick.

Let's continue vigilance in pointing out koyaanisqatsi, life out of balance, when we see it.

CHAIR RICHARDSON: Thank you very much. Questions, comments from the Board? Yes, Nick.

MEMBER MARAVELL: You were suggesting that organic seed be tested for GMO content and you were suggesting that that not be paid for by the person planting the seed, the organic farmer planting the seed. You said it should be paid for by the seed supplier. Would you talk specifically what would the seed supplier test for and is that seed supplier, for example, I am a seed producer, am I considered, in your thinking on this, as the seed supplier or if I sell that to a seed company, are they the seed supplier?

And then what specifically would you test for and then what would you do with the result?
MR. WALKER: Yes, I think our main idea here is that it is not practical to have each farmer using an organic or a commercial availability allowance to test that seed. And where I said seed suppliers, what I am really getting at is pushing the burden upstream or the downstream.

MEMBER MARAVELL: Well, I might be upstream. But let me ask you, are you suggesting this is only for organic seed producers or would conventional seed producers who are supplying to organic farmers because they can't find a suitable organic variety, would they be required to test?

MR. WALKER: Conventional as well. Again, it is about shifting the burden and having the polluters pay. I think that is the angle here. If it is -- there is an organic trust issue if organic seed has contamination levels. We talked about that some. And then certainly, there is more risk with nonorganic seed.

MEMBER MARAVELL: And I have one final question and that is one of the most invidious forms of GMO contamination that could potentially affect
my seed supply is dust because farms that are surrounding me are not organic. When their combines go through, I have got to prevent the dust. Well, I can't prevent the dust if my crop is still standing in the field. So, I was wondering, is there a way, when you run a test, to determine whether or not what you are finding is able to propagate or not? In other words, if you send in a sample of soybean seed or corn seed and it has got dust on it from a GMO farm that was adjacent to you, when you plant that out, it won't grow GMO. But if you test it, because our testing procedures are so accurate now, it will come out as positive for GMO. Is there any way to get around that problem? Because that is a very serious problem.

MR. WALKER: I think that is what we are speaking to is practicality in the guidance. And if it is a total GMO prevention of effort, I have probably got GMO dust on my eyelashes right now.

In our written comments, we cited a report from Ohio State University which I think says you need a minimum of 660-foot buffer to get
99 percent purity in organic corn seed. And as you indicated, that is just not practical. And we did some math. We said for a square 10-acre field, you need 80 acres of buffer to get at that 660-foot -- it is an acre for every 66 feet of fence row. And so 80 acres for 10 is eight times. If you have a bigger field, it goes down to three times but it is still not practical. So, how do you balance that with an organic is non-GMO message? Let's talk about these good preventive practices. And we agree with most of them. We are just pointing out a few exceptions here that are problematic.

Let's talk about all the good that we do but be careful with the messaging because it could be misleading.

CHAIR RICHARDSON: Great. Thank you very much, Stephen. Are there any other questions or comments?

Great, we will go on to the next speaker which is Bill Wolf and he will be followed by Bob McGee.

MR. WOLF: Wow. First, I want to thank
you all for your dedication and your hard work. I am here before you today on behalf of Wolf, DiMatteo and Associates but also, more importantly, the trillions of earthworms we want to encourage with a restorative, organic agricultural system and I want to talk about the big picture that would help those guys and all of us.

Do we want organic agriculture to be truly transformative or will we be the Luddite movement of the 21st century?

Our vision for organic farming 40 years ago was to become the mainstream progressive, renewable, sustainable system that produces affordable, healthy food and fiber available to everyone. It would lead the way from the mechanistic era to a biological cooperative method that protects and regenerates our ecosystem, healthy soils, plants, animals, and people.

We can still do this but right now, we are getting stuck in the weeds. Farmers in the U.S. are not embracing organic and we are importing more and more ingredients. The attacks on organic
from within our community, the organic perfectionist circular firing squad, has provided the fuel to damage the brand and the trust of the public. And now many competing feel good label claims are less expensive; non-GMO, local, natural, all of those. The result: organic products are a niche and are considered elitist by many because most people can't afford them; thus, choosing other alternatives.

So, I ask three things. One, unify and promote organic instead of giving our critics ammunition. Be proud. Organic is the most transparent public open source standard in the world from seed to table. Two, be open to innovation that fits the organic philosophy. Encourage biodiversity and creativity. Let's not nitpick is number three. Don't reject progress while waiting for the perfect. We are at risk of being sidetracked.

When organic agriculture systems are working right, it is amazing for the planet and all the creatures on it. We have submitted many
written comments from past meetings, as well as Catherine's oral comments and they cover a range of topics. I don't have time to go over all of those today but biodegradable mulch is one of them. Keeping the National List progressive and open is another. Moving quickly to encourage pest controls by implementing the EPA's safer choice program, implementing the guidance document on materials, promoting compost, rather than restricting it by approving --

Thank you.

CHAIR RICHARDSON: All right. You finished right on the buzzer, which is pretty good. So, you do get the magic star for that one.

Questions, comments for Bill? Yes, Calvin.

MEMBER WALKER: A two-part question. Under shirt, I believe you mentioned you have the winning shirt from last Board meeting. And that is a comment I guess.

The second question is, could you share with us some ideas on we could grow more organic grain in the U.S. instead of all the imports?
MR. WOLF: Okay, well on the first part question, I am very proud of winning this shirt at the last meeting. Truly, thank you. But I wish it were organic fiber. That is my only complaint about that shirt.

The second question is a little more complicated. There are a lot of good things that can be done to encourage organic acreage and I think part of it belongs in decisions made here and part of it belongs in the entire community.

In terms of this whole idea of allowing the most progressive, most positive available tools, that is a major piece. We should be looking at our decisions, partially, in terms of what acreage can -- how we can encourage acreage. So, how can we get more Oliver the Earthworm going?

And I think approving tools for farmers, whether it is biodegradable mulch or more viable pest controls and moving the pest control program forward quickly. And on that note, I don't quite understand the resistance to using the EPA Safer Program as a starting point because, in fact,
that is what the Organic Foods Production Act said. The Organic Foods Production Act specifically called out the EPA to be responsible to review inerts. So, we seem to be somewhat selective about where we use OFPA and where we don't.

I think we also should put the burden on increasing the use of organic seed by requiring testing of the nonorganic seed that is going into the system, where there is actually no requirements.

I think in the private sector, we could be encouraging and creating a B2B transition label. Organic Trade Association is working on that now. I think the most important thing is to create a stable standards platform.

This relatively new approach to sunset or a standardization is one of many examples of having a stable regulatory platform. Farmers I know who talk to me about whether they are going to go into organics say they are scared of going into organic because they are not sure what the standard is going to be next week or next month or
next year. And so that is a real risk. Be consistent. So, those are a few ideas.

CHAIR RICHARDSON: Francis, do you have a question?

MEMBER THICKE: Yes, thank you, Bill. I don't know if you are the right person to ask this but you mentioned bio-based mulch. Do you know what the ultimate state of that is on the molecular level when it breaks down? If it is 10 percent biological based material and 90 percent petroleum based, what happens to that when it breaks down?

MR. WOLF: Well, the original source materials originated from different forms of carbon. That is where that 10 to 20 percent of the bio-based mulch content, depending on which manufacturer, came from plant materials and 80 percent, according to the OMRI report came originally from petroleum based carbons. But the actual polymer that is produced is very similar and so it is not petroleum that is in the product. It is a polymer that is manufactured and has a little more flexibility -- I am not a scientist on this.
I have read the papers and my understanding is that at the end of the day, those two polymers are very similar.

MEMBER THICKE: And they break down.

MR. WOLF: Well, they both break down. The end result is a breakdown into carbon dioxide and water, through biological means. And I have experimented with the material myself in my own gardens and then attempted to remove it, in order to comply with the rule and keep my farm organic. It wasn't easy. I left pieces that eventually disappeared. So, perhaps, I don't have an organic farm now, at least at this point.

The bottom line is that it is a little confusing when somebody says oh, it is made from petroleum. Many, many materials on the National List are made from petroleum. It wasn't one of the criteria that the petitioner originally evaluated or the technical reviewer evaluated. It was added as an annotation during the committee discussions after the technical review, which today would not be allowed.
MEMBER THICKE: Right. I guess my concern is the breakdown product. I know carbon dioxide and water would be somewhat -- are there residual chemicals that are not --

MR. WOLF: Not according to the National Sanitation Foundation, the ANSI standards, or all of the science that we have looked at. It is the same polymer. It is just the source parent material that was in question.

CHAIR RICHARDSON: Thank you. Zea, you have a question?

MEMBER SONNABEND: Well, Bill, you opened yourself up to this. If it is the same polymer, why can't they make a higher percentage from bio-based material?

MR. WOLF: Well, I may be overstating the same polymer. The explanation that I have been given was it has to do with tensile characteristics and the blending. And I think that that is the ideal goal, to be 100 percent bio-based. I think that would be great. We are not there yet.

And I had the impression, my
understanding, when those discussions were occurring in Providence, that what was being approved was a standard and an annotation that said we would test for the content and then five years later, we would determine if we could elevate the platform and say okay now, we are going to require X percent because we saw that movement.

Does that answer what your question is?

CHAIR RICHARDSON: Great. Thank you very much, Bill. I see no more questions.

MR. WOLF: Thank you.

CHAIR RICHARDSON: The next speaker is Bob McGee and he will be followed by Linley Dixon.

MR. MCGEE: Good afternoon and thank you for the opportunity to talk with you this afternoon. My name is Bob McGee. I am the President of Straus Family Creamery. Straus Family Creamery was founded in 1994 and was the first 100 percent certified organic creamery in the country. And in 2010, we became the first creamery that verified all of our farms under the Non-GMO Project.
And the reason I am here this afternoon, like several others, is to speak in support of the proposed prevention strategy guidance for excluded methods submitted by the Materials Subcommittee. The recommendations contained in the report will give organic producers and handlers strategies to prevent GMO contamination and provide certifiers with guidelines for testing and sampling. At the same time, we hope this is just a first step to actually including testing as part of the rule.

As has been said many times, consumers are asking more and more questions about where their food comes from, what is in it and how it is produced. The future of the organic system is predicated on maintaining consumers' complete faith and trust in the integrity of the organic label. And certifiers must be equipped with the tools to enforce this regulation. For us, the livelihoods of the eight family farms that supply us milk depend upon it.

In 2011, a study conducted by the OTA showed that 11 percent of corn labeled as organic
was contaminated. Earlier this afternoon, we heard the President of CCOF Certification Services say that their residue testing is showing contamination in corn, soy, and now in alfalfa. Clearly, our best efforts at prevention strategies have not been completely successful. That is why the committee's report is needed and timely but, again, just a first step.

As noted in Appendix A of the proposal, quote, testing is one of the most definite and effective tools certifiers can use to evaluate whether an organic operation has adequate measures in place to prevent comingling with nonorganic GMO crops, as well as intentional or unintentional contact with GMOs. We hope that the Materials GMO Subcommittee will go beyond simply a guidance recommendation on sampling and testing and move to rulemaking. We believe it is important to require that a portion of the required residue testing be for GMOs and certifiers report the results of those tests, so we can know how effective it is.

In summary, I urge the NOP to accept the
proposal, publish guidance, and then move towards testing for GMOs as part of the rule. Thank you.

CHAIR RICHARDSON: Thank you. Comments, questions? You're lucky. You are getting off with no questions. Thank you very much, Bob.

Before we got to the next speaker, just a quick reminder to everybody that even though you can't see Harold, he has, for the last several hours been listening in on Skype and so he is still there. He is still listening to the public comments.

The next speaker is Linley Dixon and he will be followed by Rudy Amador.

MS. DIXON: Good afternoon. My name is Linley Dixon. I am a policy analyst for The Cornucopia Institute. I own 110-member CSA Farm and Farmer's Market Vegetable farm in Durango, Colorado. I have a master's degree in plant and soil science and a Ph.D. in plant pathology. One of the biggest problems facing the organic industry today is that young farmers like me are not getting certified. It is not because organic activists
are hurting the label but because we don't identify with the industrial monoculture style operations that are currently getting certified.

I would like to testify today about how the abuse of copper on some of these operations allows them to get away with a lack of plant diversity on their farms. I have extensive knowledge of plant disease management in both conventional and organic systems, as a farmer researcher with the USDA ARS. I have previously testified to the abuse of copper, used on split organic conventional tomato operations on the east coast in particular.

I have personally visited these monoculture style operations that use weekly copper sprays as their primary disease management strategy on their organic crop. Sprays are needed every seven to ten days because copper fungicides are protectants, meaning that once infection has occurred, copper has no effect on disease progress in the plant. So, it must be applied to the foliage before infection and reapplied as plants are
exposed to the inoculate through the season.

Typically, each spray with a copper-based fungicide results in an application of one to four pounds of copper per acre, which raises the topsoil concentration approximately one to two parts per million every spray. Some tomato farmers that I surveyed said they sprayed 12 times per year, raising copper concentrations roughly 12 to 24 parts per million per year. Farmers admitted to me that they had removed land from organic tomato production after three years. Clearly, this is not a sustainable practice but these operations exist under the organic label and I have been to them.

Copper, like other heavy metals, binds to organic materials and to clay and mineral surfaces in the soil where it denatures proteins and is shown to suppress nitrogen fixation and reduce earthworm counts. As an immobile heavy metal, copper accumulation is irreversible. So, limitations on copper use must be in the regulations.
In trying to reign in the copper abusers, we need to be careful that we don't hamstring the farmers who are using copper responsibly with excessive regulations. However, we feel that annotations for specific uses and rates should be proposed. Most importantly, certifying agents in the NOP must enforce the diversity requirements of OFPA, when considering whether or not to certify a farm in the first place to prevent the excessive need for copper sprays in tomato monocultures.

Critics rightly cite the use of synthetic copper in organic farming is being more environmentally problematic than some other synthetic fungicides that are not allowed in organic farming. In the search for alternatives, please consider adding phosphorous acid to the National List, a much safer and environmentally friendly option for plant disease control, particularly effective against water mold diseases such as a late blight of tomato and potato, diseases for which I have witnessed the overuse of copper.
for disease control.

CHAIR RICHARDSON: Thank you Linley.
Questions? Zea.

MEMBER SONNABEND: You are aware that we have a petition process to petition phosphorous acid or to petition an annotation change for copper that could be submitted anytime?

MS. DIXON: Yes, I will do that. Thank you.

CHAIR RICHARDSON: Other questions? Okay, thank you very much Linley.

The next speaker will be Rudy Amador and he will be followed by Tina Ellor.

Oh, I should -- may I make sure everyone understands that our next speaker, his first language is Spanish and he will be presenting in his native language, as is appropriate. His presentation on the screen will be in English and he does have a translator. And therefore, obviously, there will be a few more minutes' time allowed in order to accommodate the necessary translation. Is that right?
MR. AMADOR: Just a clarification. There are some folks after me that will be speaking in Spanish.

CHAIR RICHARDSON: It is the person after you. Okay.

MR. AMADOR: Although, I do know there are some Board members that are Spanish speakers, I will do mine in English.

CHAIR RICHARDSON: Okay, thank you.

MR. AMADOR: Because of the importance of ethylene in pineapples, my comments are basically going to be just regarding that material.

I work with Dole Tropical Products Latin America, based in San Jose, Costa Rica. We are the largest grower and exporter of organic pineapple from Costa Rica, also the largest marketer of organic pineapples in the U.S. We are a subsidiary of Dole Food Company, California-based and in Costa Rica, we operate two organic farms with about 400 employees in those farms.

We are also proud to say we are pioneers
in Fair Trade organic pineapples to the U.S. market.

I won't get in too much detail but ethylene use for flower induction is the most important agricultural practice for the production of organic pineapples and that allows us to plant harvests in every other agricultural practice after flower induction. Without it, we would have severe pest issues. We would have much lower yields and quality issues.

In the Codex process, Codex application Costa Rica and the UE together basically gave several reasons I just selected this one. And they are basically saying that without ethylene, there cannot be a consistent export business for pineapples in being able to plan not only production but also the use of labor throughout the year, with all the economic impacts of that.

I did bring just a few pictures. This is what we are talking about, this product is applied normally with a boom spreader and it is applied at nighttime to avoid -- it is a volatile
product so you want to do it at nighttime when it is more effective. It is applied with water and activated carbon. This is standard practice.

After application, about six or seven weeks, you are going to see a bud in the plant and 22 to 24 weeks after application you are eventually going to have a nice looking organic fruit.

There are alternatives which none are really good environmental alternatives or economic alternative. I will not get into that because I have got my yellow light here.

The regulatory situation is pretty clear. It is allowed in Costa Rica, Canada. Codex is an interesting case because as early as 2012 it has been listed and reviewed. The U.S. delegation, the Codex committee voted to include ethylene. And in the United States, obviously, it is allowed at the present time.

This is very important to us. The societal impact of removing ethylene would mean most likely conversion from organic to conventional or for the farmers to get out of
business. In the case of Dole, there is going to be 400 jobs lost. That is 1600 people directly for a family four. For the U.S. consumer, there will be no organic pineapple purchasing options for retailers/processors, a loss of an emerging markets, international trade issues, conflicts regarding trade. And every important also, lately, the organic pineapples that I mentioned, they are receiving or the farmers are receiving a fair trade social premium that is managing that product, for example, as shown there for adult education. All those are in danger.

And I just wanted to end that if those technical arguments don't convince you, these are some of the nicest flowers in agriculture. And actually, you wouldn't have your beautiful autumn leaves here in Vermont if it wasn't because of ethylene.

So anyway, thank you for your attention and for the opportunity. And thank you for bringing us to Vermont, Michelle.

CHAIR RICHARDSON: Thank you, Rudy.
Questions, comments? Okay, thank you very much.

Our next speaker is Tina Ellor and she will be followed by Johanna Mirenda.

MS. ELLOR: Good afternoon. I can't ever get up here without thanking you guys for what you do. I have some small idea but I think the workload has grown, it seems, exponentially since I sat on that side of the table.

My promise to you in my written comments that if you had no questions for me, I would give up the mike but there is one more material that came up that I would like to address and that is the cheese wax for the outdoor growers.

I think this is not on their radar. I did a quick email while I was sitting here and asked them do you need this, the people that I know, and they said yes, please. And I know there is a petition for soy wax. So, if we could keep cheese wax on until the soy goes through the python, as Jim so eloquently put it, I think it would be greatly appreciated.

I know I visit with a lot of -- because
I am a mycologist, I go on wild mushroom forays. I visit with a lot of small mycology clubs and there is a lot of people out there using cheese wax in their very small organic outdoor log operations.

And the other thing I just wanted to bring up quickly is that words do matter. So, I know from the past, sitting in many of these meetings, that I wouldn't like to see the word soilless system get into the regulation in any way because we were given a lot of trouble by the non-plant life part of the livestock definition, which would have put mushrooms into livestock, which doesn't really make any sense. So, words do matter.

So, if you have no questions, I will relinquish the mike.

CHAIR RICHARDSON: Thank you. Questions for Tina? Okay, thank you.

The next speaker is Johanna Mirenda from OMRI.

MS. MIRENDA: Hi, the Board, thank you for having us. My name is Johanna Mirenda. I am
the Technical Director of OMRI, the Organic Materials Review Institute. My comment today focuses on the enforceability of the proposed annotation for the listings of inert ingredients at 205.601(m) for use in crop pesticides and 205.603(e) for use in livestock external pesticides.

I will also provide a brief technical comparison of the proposed annotation to the current regulations and approved products.

In regards to enforceability, please ensure that the specific language in the proposed annotation accurately reflects the intent of the subcommittees so that the requirements can be accurately and consistently implemented if the proposal is codified in the regulations. Part 1 of the proposed annotation does not make a distinction between the substances eligibility as an active or inert ingredient and an EPA 25(b) exempt product. As written, the proposed annotation would allow any substance that is eligible for use in a 25(b) exempt product,
including the actives.

Part 2 of the proposed annotation does not make a distinction among the functional classes that substances are grouped by on the EPA safer chemical ingredient list. As written, the proposed annotation would allow any substance in any of the functional classes, regardless of the actual inert function that it exhibits in an organic approved pesticide.

If our understanding of these parts of the proposed annotation are not in alignment with the intent of the subcommittees, please provide clarification in the Board's final recommendation.

And now please refer to your handout for a technical comparison of the proposed annotation with current regulations and approved products.

In 2011, OMRI was asked by the NOP to provide a list of inert ingredients. And OMRI listed pesticides for use by the Inerts Working Group. We provided a non-confidential list of inerts included in OMRI listed products without associating them with any specific products. We have used this same data to
assist how OMRI listed products might be affected by the proposed annotation, which we feel is a good indicator of the implications for the organic pesticide industry at large. Of the approximately 177 synthetic inert ingredients used by OMRI listed suppliers at the time, about 130 would remain allowed under the proposed annotation. Approximately 47 inert ingredients in use at the time are synthetic do not appear on the SCIL or 25(b) lists and would be prohibited under the proposed annotation.

OMRI has provided these figures to the Board to assist in your review of the implications of the proposed annotation. However, we do not take a position for or against the proposal. Thank you.

CHAIR RICHARDSON: Thank you, Johanna. Questions? Yes.

MEMBER SONNABEND: This is very confusion. You are assuming that SCIL is not reviewing anymore products when you give this data? The whole idea of the program with SCIL is for them
to review all these products. So, saying they would be prohibited is counterproductive.

  MS. MIRENDA:  Sorry.  I guess based on the products on this, the current substances in the SCIL list.

  MEMBER SONNABEND:  Okay, then I am very encouraged that we would only have to review 47 new substances because that is not what our information says. But okay.

  CHAIR RICHARDSON:  Other questions or comments for Johanna?  Emily, did you want to add anything?  No?  Okay.  Thank you very much, Johanna.

  The next speaker is Mark Feduke and the following person would be Olman Briceno.

  MR. FEDUKE:  Good afternoon.  It is the latter part of the day, so I will try to bring a little bit of energy.  Good afternoon to everyone.  My name is Mark Feduke.  I am the Director of Operations at VLM Foods.  We are an importer distributor and I want to thank the NOSB for providing me with the opportunity to speak with
you folks and also for holding this in Stowe, as it was a very pleasant drive from our office, a little further north in Montreal.

So, I would like to begin by saying that as an importer, our foreign food safety capacity-building measures have been recognized by the World Bank as being a leading progressive strategy, given the growing consensus that food safety is a critical driver of productivity in the developing world and also for transitioning economies. Against that backdrop, we are extremely proud of the work that our partners in Costa Rica are doing with respect to organic pineapple production, a model that does not see growers receiving a fair price for a product or receiving a premium for organic product and that product is then not sent north to be advanced wildly in value in the global north but is, instead, processed in Costa Rica with benefits accruing to the local populous in Costa Rica.

The motion to remove ethylene gas as an approved flowering agent in the production of
organic pineapple doesn't make any specific requirements or case for removing it this time in the motion itself but the motion does state that the use of ethylene gas has helped grow the organic pineapple industry and allowed producers to compete globally, which, in my humble opinion, I think is in our collective best interest.

In our discussions with our partners in Costa Rica, farmers and processors, we are not aware of a viable alternative at this time. I fully appreciate there are stakeholders who will make comments otherwise and I respect their input. However, looking at some of the comments that have been given, there have been suggestions of using alternatives which presently are not even approved for organic production or there is suggestions of using a water-based cold stress method, which I am sure works wonderfully in other areas, however, at present, it would not be economically viable in Costa Rica, let alone additional concerns that we have with yet an additional level of water being applied, given that we are still waiting to find
out what the final microbial water testing requirements are going to be under the fresh produce rules of FSMA, which I know that we haven't really discussed at all today because that is around the horizon.

I understand that a great deal of work has been done in the FSMA space in alignment with USDA, however, all these regulations are subject to a much higher law, the law of unintended consequences. As FDA notes, FSMA presents the most sweeping update to American food legislative to have been enacted over the past 70 years. And if anyone in this room thinks they won't be touched by FSMA, they certainly will.

Now, broadly speaking, we support FSMA. We think it ought to provide an opportunity to level the playing field but, having said that, there are great concerns that have yet to be realized what the true costs will be as we move forward.

If ethylene gas is to be removed as an approved input at this time, it will promote less, rather than more, organic production in Costa Rica.
It will hurt farmers, large and small, and diminish the overall magnitude of organic products in the marketplace. And my time is up. Thank you.

CHAIR RICHARDSON: Thank you very much, Mark. Are there any questions, comments from the Board?

We have received, as you know, a large amount of written material on this topic as well, to which your comments are added. Great. Thank you very much.

MR. FEDUKE: Thank you for your time.

CHAIR RICHARDSON: The next speaker is Olman Briceno and he will be followed by Christian Herrera.

MR. BRICENO: Good afternoon. A former colleague of mine used to say that if you are not in the table, you are probably ending up in the menu. So, I am very thankful for everybody to have us Costa Ricans onboard today and I appreciate really the opportunity to come here with a lot of stakeholders of organic production of pineapple, together with me today.
As I said, I am Olman Briceno. I am Vice President of the Chamber of Exporters of Costa Rica and I am sitting in that table, representing small and medium enterprises in rural areas.

So, it is very simple as this. The elimination of ethylene in organic pineapple production compromises Costa Rica's policy led by the Ministry of Agriculture, which seeks to increase organic production in the country. It is important also to highlight that organic pineapple is grown by many small holders in regions of the country with important challenges regarding sustainable development goals.

The proposed elimination of ethylene is a hard stop to the sustainable livelihoods of all farmers engaged in organic agriculture. With their elimination, we would also erase a unique value-added proposition posted organic growers that also have enticed, together with the organic production, efforts that are now in my country key lime markets, for example, the first carbon neutral organic pineapple farm; the first industrial
facility organic that is carbon neutral led by my 
wife, which I am very proud of; also the first 
commercial initiatives that are being carried out; 
and also, we have various listings of comparatives 
that are highly involved in the production of 
organic pineapple, this, under gender equality 
opportunity.

The government has also compromised a 
lot of financial support, among other many things 
that I can mention.

So, I would like to invite you over to 
Costa Rica to look at this. And we are very 
optimistic as Costa Ricans and very proactive.

I think that this proposal to eliminate 
ethylene has also fostered a small organic 
pineapple farmers to engage and advance on the 
agenda on issues and expectations related to 
policy. So, many of the small farmers now are 
encouraged to establish a new chamber of producers 
of organic pineapple, which has been the result of 
all these discussions inside the country.

So, I am very thankful for everybody in
here and I am very thankful for the members of the Board that are going to continue to support the organic production of pineapple in my country. Thank you very much. Any questions?

CHAIR RICHARDSON: Thank you Olman. Are there any questions? Harold has a question. Harold.

MEMBER AUSTIN: Buenas tardes, Olman.

MR. BRICENO: Hello.

MEMBER AUSTIN: Thank you for coming up and bringing your testimony for all of us to hear.

MR. BRICENO: You're welcome.

MEMBER AUSTIN: My question is on our first public comment period, we heard such few comments coming in from the producers themselves. Is there value, I guess -- two questions. Is there value to us having two public comment periods for testimonies to be heard by the Board and the public. And second, what happened that you guys did not get the message during the first public comment period?

MR. BRICENO: Well, it is a good thing. I believe that I cannot talk about the past why we
were not there but absolutely we are here. And I think that arguments that we are giving, as I mentioned to you, I am very thankful for the opportunity to be here.

Right now, I think it is a good opportunity to put all the messages across and all of the objective arguments and elements for a comprehensive assessment of this decision to get ethylene out of organic pineapple production.

So, talking about the past, I prefer not to mention why we were not there, initially, but we are here. So, any questions on the technical side, we have a group of engineers, agronomical people with a lot of expertise and small growers that can go into the details of why ethylene is so important to maintain the livelihoods of so many people in our country.

MEMBER AUSTIN: Thank you.

MR. BRICENO: You're welcome.

CHAIR RICHARDSON: Any other questions? Yes, Calvin.

MEMBER WALKER: I like that quote. My
boss, always using that quote.

My question is, without ethylene gas what percent of the U.S. market would be impacted?

MR. BRICENO: I would refer that question to Mr. Christian Herrera. The quality measure have more quantitative data.

But what I am telling you is that I engage on a regular basis with the small producers and what they have said, and you will hear it from them today, probably I will be translating for them, is that they would be out of business. All right? And they will probably not go to conventional pineapple because they are in organic production. So, there is a big problem for them with this ethylene issue.

All right, thank you very much, Mr. Walker, for your comment.

CHAIR RICHARDSON: We have a question from Tom.

MEMBER CHAPMAN: Are you aware of any small producers who are not utilizing ethylene at this time?
MR. BRICENO: No, sir. All the small producers, everybody that works with pineapple organic is using ethylene at this moment.

CHAIR RICHARDSON: Gracias.

MR. BRICENO. Thank you for all your questions. I have been well -- three questions. That is very good. Thank you.

CHAIR RICHARDSON: Thank you. The next presenter is Christian Herrera and to followed by Nestor Ramirez.

MR. HERRERA: Good afternoon to you all members of the Board. My name is Christian Herrera and I am here honorably representing 21 grower cooperative that just started at the beginning of the year.

I am the Vice President of the Pineapple Growers Chamber in Costa Rica, gladly, after being the President for the last two years, and being on the Board for eight years.

I am trying to get as brief as I can because three minutes is really, really torturing me since there is so much to say.
I want to thank Michelle for choosing such a lovely place as this magical place. We normally get to the conference in Miami and here is a much, much beautiful place.

Let's speak about my co-op. The background is in Costa Rica for the last 15 years has become the first exporter of fresh fruit in the world, so far, with more than 95,000 acres of conventional production. Your questions, sir, is that our figures now that we are not reaching the 2,000 acres of organic pineapple among 60 growers. The colleague from Dole said they are the biggest but we are not that far away from them, from their volume. We are improving.

After 15 years and all this experience for the last 15 years, we have become the best technology in the world and we are supplying our agronomies to worldwide in Philippines, Brazil, and all Latin America and the rest of the African countries.

We run the leadership in research, since we have a lot of areas, a lot of acres to take
care of and we started our first organic operation and started in the year 2001 and it was one of the agronomics who started that project.

For the last 14 years, I have been a conventional expertise but now all my organic colleagues are just washing my brain out because organics is in the tropics. When it rains more than 300 inches a year is really, really, really tough.

The co-op was established because we found a stable market with a fixed price. So, we started we know whom to sell, at what price, and the profit that we are going to get, if we do good in the field.

The co-op was born. You know 21 growers with more than 70 years of expertise in organics. We just joined all of the forces together to start this production. Our target is to reach a thousand acres by the end of 2016.

The business plan is that first the market demands organic production more and more at a reasonable price. If I stay taking care of just
one pineapple, I can do it organically, but it is going to cost 12 months of my time and nobody will buy it. So, we need to be profitable business within the technology available so far.

Pricing is a matter in organic market you already know that it is very sensitive. When the organic prices just go up, nobody will buy that and then the fruit will stay on the shelves.

And it is a matter of where we are. We are located in the north region of Costa Rica.

And then we will be around. So, for anyone who has more questions, okay.

And the ethylene thing is, that is a picture of how we spray it. Small growers have the best technology, the same as the big international companies. So, we have the technology of using ethylene in a safe way, using the water and the limestone.

Thank you very much. And any question? I know that three minutes wouldn't make it.

CHAIR RICHARDSON: Thank you very much. We have received a large number of these
comments already in writing and I know we have two sets of questions.

Tom, do you want to start? And then Harold.

MEMBER CHAPMAN: Are you aware of any small producers in organic that are not using ethylene?

MR. HERRERA: Completely being the President of the Board and representing my industry, there is no grower in Costa Rica using nothing else but ethylene gas because it is cheap expensive -- very cheap, very accessible to the growers and the technology is already there.

CHAIR RICHARDSON: Harold.

MEMBER AUSTIN: Thank you. You kind of answered a little bit of what I wanted to say. In this case, size doesn't really matter. All of the pineapple producers are using this material. Correct?

MR. HERRERA: Yes, sir, in Costa Rica, they are.

MEMBER AUSTIN: And even the smaller
growers have access to the equipment for application purposes.

MR. HERRERA: The spring system is that we use the gas mixed with kind of a limestone or active charcoal as a mechanical transport agent. And it is a drench application. So, so far, we need to put more than 500 gallons an acre per application. So, it uses a lot of water for being such an extensive crop. So, considering that, even the spray, regardless of how small the sprinklers are or maybe 300 gallons, the small tanks, they have the system, which is a homemade done just to mix the gas with the active charcoal or the limestone so there is going to be like an absorbing agent to be sprayed and made the effect.

Why we need a trigger with the ethylene is to adjust to the varying shape of growth and they just trigger the flowering, which is something that really happens in nature. But we need to spray all the areas in the same time just to achieve a visible harvest rate. We need to make one container take 12,000 fruits of organic pineapple and then we have
to spray it on the same time so the harvest will come at the same time. And that is what make it physical.

Naturally, if you leave the crop for three years, it might flower but randomly. Then the grower should be as many like 40 years ago, they went into the field just pitching while the fruit is ready and that is not possible. And they market the fruit all year round and is one of the biggest advantages why Costa Rica is the leader because we have fruit all the year round.

CHAIR RICHARDSON: Thank you. I have got a lot of hands up here. We are running about 20 minutes behind, just so you know. So, make your questions short.

Harold, you have a follow-up, then I have Jennifer, then I have Nick.

MEMBER AUSTIN: Okay, my follow-up is with the full application of the material and not having to go in periodically, what impact does that have on worker health, environmental impact, and biological controls within your field?
MR. HERRERA: Okay, labor safety, very, very important question. The spraying booms are operated by one operator in the tractor and the sprayer is just spraying the back with the tank. So, there is no direct exposure or exposition of the gas within the employees. The gas must remain there for many more or less like ten minutes in the field just to make the trigger of the flowering. So, after 15 minutes, there are no gases in there. I can even be in the fields I come and remember what the smell of the ethylene missed with the limestone.

So, in labor safety we have been audited, with our years in Costa Rica, we have all the European and the American customers auditing us every year. So, we have comply with labor safety first and then the rest of the environment.

As far as we know, ethylene is not the carbon footprint agent and is not also later deploying so I think we are working with such an innocuous particle. Inequity of the fruit is not a matter of discussion. There is no way the
ethylene we apply will show up in the residue in the fruit and the consumers. It just is the same thing.

CHAIR RICHARDSON: Jennifer.

MEMBER TAYLOR: Thank you. I just wanted to understand what you are saying when you say that all of the farmers in Costa Rica are using ethylene, are you talking all of the farmers that are in your cooperative or are you talking about all of the farmer in the country?

MR. HERRERA: One hundred percent of the growers in Costa Rica, which is 1250 growers actively exporting to the U.S. are using ethylene. I love figures. I love data.

MEMBER TAYLOR: Great.

MR. HERRERA: I apologize.

MEMBER TAYLOR: Thank you.

MEMBER MARAVELL: Is there anything that you see in the future that could lead to an alternative to ethylene? And I will just make an example, which may not be appropriate, but is there any research being done into alternative breeding
that might be of value or any other alternative methods? Is there anything in the works that is being explored as an alternative?

MR. HERRERA: Now, because of this point that the ethylene is someone asked to be banned is the first time that we ever needed to search for something else. Because for the last 15 years, it is the first and the biggest threat and that is why we have a very big Costa Rican community here because we thought that was completely innocuous and it is. And it is technically proven.

So, nobody has done research to do some other choices. Research is expensive and so far, the businesses are tight. Well, maybe the growers and the co-op, we have a small budget to implement and improve the agricultural practices being applied in the field but not accurate research.

So, so far, there is no option and why should we do more research if the molecule can be used for the rest of the years.

We have written all the comments there
and there is a proposal for using smoke. So, you should be burning something. That is against all the C neutral movement and we don't want to use fire anymore.

The other thing is, just to use water. Just to make a natural plant to be flowered by cold water, you need almost six gallons of freezing water just to make the trigger and that will mean a lot of dollars per hectare in a four time period. So, we are applying more water when we are just almost flooding in Costa Rica, so it is completely contradicting.

We have to by the carbon footprint, we need to measure how many energy we need to reinvest in our crops. Just cooling that water when we are all year round about the 90 degrees, you know it is nonsense.

CHAIR RICHARDSON: Okay, one last question. Tracy.

VICE CHAIR FAVRE: This is as much a statement as it is a question. I wanted to thank you for taking the time and energy to come here.
It is an important reminder to those of us on the Board as we are making these decisions that there is real people and real companies and families impacted by these decisions.

I guess my question is a little similar to what was asked earlier by Harold about the sunset process. There was two meetings here to provide commentary. I guess my thought was how dangerous it might have been had there only been one comment period, as there was under the old process, where we might not have received these comments. And having a little bit extra time to come back kind of the second go-around where yes, we really mean it, we are thinking about it, was that helpful to you and your organization?

MR. HERRERA: Well, we are here in the second review is because we are farmers and we are in the middle of our crops. So, we are not very political. You know we are in the crops.

So I think yes, we have one of the government telling them hey, why they let this to happen. They should be contacted with the USDA and
we need to improve the communication within the USDA and our national authorities because we rely on them now. We are here and we can get direct as you want. We are going to be here until Thursday. So, any questions, further, for more information, you know I love to talk and our growers are just wanting and willing to be here in front just exposing. Because you know I am the manager of a co-op but we have some growers here by themselves. So you want to hear their histories. Okay, thank you.

CHAIR RICHARDSON: Thank you.

Gracias.

The next speaker is Nestor Ramirez and he will be followed by Maykool Lopez.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: Good afternoon. Thank you for bringing me over to Vermont.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: He studied agriculture
from '92 to '95 from a very humble housing.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: His studies were in sustainable agriculture. That is the main area of his emphasis during his studies.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: In 2005, he started a 40 hectare plantation of his own.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: He started with five hectares.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: And he now has, after hard work, 40 hectares of organic pineapple.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: This experience has helped him to be an advisor in other countries
outside of Costa Rica in organic plantations.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: That is his farm in Costa Rica. He is now a member of the cooperative that Christian is heading.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: He is just 15 kilometers away from Nicaragua, so we are very close to it.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: The use a spray boom to make the applications of the crop with ethylene.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: He is explaining how that tank is being used to transport all the ethylene that is used in the field.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: Okay, he is transporting
it in a very secured manner and has a certain type of valves that secure that it is not going to have any leak or any dangerous situation out of the use of ethylene in the field.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: After seven or eight months of the pineapple being planted, they will have the first application of ethylene in the fields.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: That is a fruit of 55 days post-application of the ethylene.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: After these days, they have to combat and prevent the application of any pest and diseases. So, it is very complicated.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: That is 80 days after the
application of ethylene.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: That is 100 days, 110 days after application.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: And when it is ready almost to harvest, they have to review the internal condition of the fruits in a random way.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: This is so important for what he is going to be talking about very soon.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: These are fruits that have been harvested with a bad application of ethylene. You see the different colors, right?

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: And you see that are some
are more ripe than the others, the ones that are in the bottom.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: That is the internal condition that is different.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: And you see the bad application of ethylene has an impact in the quality of the fruit. The ones on the left have been more ripened than the others on the ripe.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: And this would happen if we don't use ethylene in a correct way. It will be very randomly the whole plantation will behave and how it will ripen.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: This is just how they harvest the organic pineapple in the fields.
MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: The fruit is green on the outside. This is how we harvest it.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: With this color, green color, it would look green on the outside but when you go and look at the flesh inside, it will be very nice for the consumer.

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: When he is hearing that people are proposing the use of cold water for the flowering of the pineapple, we have a similar conditions that are present naturally in Costa Rica in December, in the north of Costa Rica, where it is quite cold. We are talking cold, 18, 19 degrees that is how cold it gets in Costa Rica. It is not that fine, you know. But then we have a very awkward and random way of ripening the fruit in natural conditions.
MR. RAMIREZ: Gracias.

CHAIR RICHARDSON: Gracias. Thank you. We do have a question for you. Tom.

MEMBER CHAPMAN: Is the ethylene always applied via the boom truck equipment that was shown earlier?

INTERPRETER: I'm sorry, I didn't hear your question.

MEMBER CHAPMAN: Is the ethylene gas always applied via that boom truck?

INTERPRETER: (Foreign language spoken.)

MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: The only way to apply ethylene in Costa Rica in the fields is with the spray boom.

MEMBER CHAPMAN: And is that equipment owned by the cooperative and shared amongst the farmers?

INTERPRETER: (Foreign language spoken.)
MR. RAMIREZ: (Foreign language spoken.)

INTERPRETER: Normally, the person that owns the land and the plantation owns the spray boom but if he is too small, what he will do is rent it from the person that has it and it will just pay for the use of that service.

MEMBER CHAPMAN: Thank you.

CHAIR RICHARDSON: Other questions, comments? Thank you very much. Muchas gracias.

INTERPRETER: Okay, thank you.

CHAIR RICHARDSON: The next speaker is Maykool Lopez, to be followed by Cecilio Barrantes Quesada.

MR. LOPEZ: Hi. Good afternoon. Thank you very much for giving us the opportunity to talk to you. My name is Maykool Lopez. I am the Trade Commissioner of Costa Rica, based in New York. I represent PROCOMER, the government agency responsible for promoting Costa Rican products in international markets.

I definitely would like to thank the
National Organic Standards Board for giving us this opportunity here.

I am going to comment about the impact of the conventional and organic pineapple activity as an economic and social engine in Costa Rica, therefore the effect on the business community, employment and on the people.

Costa Rica has thickets of genuine commitment on sustainable production and well-intended economic sectors like pineapple growers, and indeed, the organic pineapple growers. We see this will be seen as an important contributor to the export diversification policy and the development of the country. A change in the worldwide revelations like the use of ethylene in organic pineapple flowering might affect hundreds of people and a good amount of the small and medium-sized producers that work to differentiate its product and complied with market requirements to meet the most strict secure safety and health standards.

We are talking about an organized
international industry that has been able to provide commercial scale and certified shipments to consumers to the world. This requires the implementation of a complete business model of processes, programming, and logistics, as you just saw. This model certainly has been implemented not only by large international organizations but also by small and medium-sized companies that have worked with international NGOs, foreign governments and enthusiasts to support the Costa Rican economy, actually to support the Costa Rican talent and very well educated talent.

Although Costa Rica has been positioned as number one producer and exporter of conventional pineapple to the world, it is actually the second most important product being exported from Costa Rica. The pineapple has reported 127 exporting companies; 63 percent of them are small and medium-sized enterprises that employ more than 200,000 employees in 2014. That actually this group of people provides 89 percent of the conventional pineapple to the U.S.--to the
pineapple that is being imported by the U.S.

Committed with the international trends, the industry has worked hard to create its part to the organic community. Our vision is to keep promoting this community to international trade shows to support our farmers. Organic pineapple represents 16.4 percent of the organic production of the country and it is now it takes a real commercial effort to the world.

This is the main product in the Costa Rican organic production and these growers have 1352 acres of cultivated and certified organic pineapple.

Costa Rica has a track record of working hard to position itself an important player in the most complex and world purpose market. I really would like to invite you to help us protect an economic engine and actually a country that protects the world.

Thank you very much.

CHAIR RICHARDSON: Thank you very much for your comments. Are there questions for
Maykool? Questions? Thank you. It was very interesting comments and much appreciated.

The next presenter Cecilio Antonio Barrantes Quesada. What a name! I tell you we don't have those names in Vermont like that.

MR. BARRANTES: Hello. My name is Cecilio Barrantes. Thank you very much for having me.

Well, in order to produce organic pineapples for the market, it is very important to use the ethylene, used basically used to further ripen the fruits. Having said that, eradicating this natural compound would have a huge negative impact in the agricultural sector. One of these terrible consequences will be the risk of over 60 employees losing their jobs only in our company and a very disadvantaged someone having the difficulty to find a job that can sustain their families.

The investment of thousands of dollars into this practice will catastrophic. The commitment with the banks will be also an issue and the end of our years in hard work will be all gone.
Just know that the tendency within the next years will be eating and having a nontoxic diet in all of our homes. Just think about our next generations.

Decreasing the probabilities of suffering a deadly disease and boosting the quality of life, we are all here for a good intentions. So my question is, do you want to have a better lifestyle feeding your families with environmentally friendly pineapples, creating a new culture of solidarity for our planet and teaching the consumer that going to the supermarket and buying your organic groceries is a mutual interaction that is not only of great benefit, but it is also contributing to a better change for our society.

Last but not least, without the ethylene, the production of thousands of farmers from Costa Rica having a big responsibility with their clients and also being a part of the incomes of the country thanks to the great vision of each and every one of them.
Well, we have heard nothing. We are a part of this movement, this new horizon pointing to the future of more longevity but this is all necessary with the help of the ethylene, being this natural gas and only for all the people thinking ahead of our times.

Thank you very much.

CHAIR RICHARDSON: Thank you very much for your comments. Are there questions? No questions? Thank you, that was very helpful.

MR. BARRANTES: Thank you very much.

CHAIR RICHARDSON: The next speaker is Lynn Coody, followed by Dave Zuckerman.

MS. COODY: Good evening. My name is Lynn Coody. I am testifying today on behalf of the Organic Produce Wholesalers Coalition, which is comprised of nine businesses that distribute fresh organic produce across the United States and internationally. Many of our businesses were early participants in the organic community and have continued to play an active role in shaping its infrastructure. We work to express our
members' ideas on the issues before the NOSB, as well as to provide a conduit to the Board for the voices of certified growers who supply our businesses. We submitted extensive written comments. So, I will touch on only a few topics today that are before the Crops Subcommittee.

First, we support the subcommittee's positions on all petitions they reviewed on laminarin, brown seaweed extract, lignin sulfonate, and sulfuric acid.

As far as annotations go, for inerts, OPWC supports the direction proposed by the Crops Subcommittee of using EPA's Safer Choice Program to modernize the system for reviewing inerts. We think this approach balances the requirements to review individual inerts with a recognition of the workload already borne by the NOSB and the NOP to review other types of materials. Our concerns in any changes made to the inerts review system are: A) preserving pest control options for the use of organic farmers; and B) encouraging options for the reformulation of products and development of new
products.

As far as micronutrients, we support growers' use of a broader range of methods to justify micronutrient use. Our written comments suggest an alternative wording for the annotation that focuses on verifiable site-specific information as the basis for the justification.

On sunset materials, we submitted comments from handlers and growers explaining how and why they used many of the 2017 sunset materials. OPWC supports relisting of many of these materials, based on our finding of their continuing necessity for commercial-scale production of organic fruits and vegetables. We also find that a few of the materials listed for crop production are no longer necessary to our sector. Therefore, we support de-listing of lignin sulfonate, sodium silicate, and microcrystalline cheese wax.

Although there too many sunset materials for me to discuss during public comment, OPWC highlights its support for continued use for ethylene for pineapple production, due to the many
responses about these materials that we received from pineapple growers. We acknowledge the continued need for this material, as there is no known alternative to its use and regulation of flowering time is essential to the success of production, harvest, and post-harvest practices used for pineapple imported into the U.S. by our members.

Thank you for the opportunities to comment today and we thank all of the Board members for their service to the organic community.

CHAIR RICHARDSON: Thank you very much, Lynn. Lynn has already, as you know, submitted an enormous number of written comments. Are there any other questions from the Board at this time? Thank you very much.

MS. COODY: Thanks.

CHAIR RICHARDSON: The next speaker is Dave Zuckerman, organic farmer, state senator, and maybe he is going to run for lieutenant governor. Who knows? Dave.

MR. ZUCKERMAN: Thank you. And it is
important running for, potentially, lieutenant governor of Vermont to know a lot about pineapple production in Central America. So, thank you. That is a lot that I have learned today.

I come to you as a production farmer of about 25 acres of vegetables, about a thousand chickens, and 50 to 100 hogs each year, all certified organic, with very diverse vegetable production with respect to running a CSA, which I am sure you are familiar with. And I bring that up because when you have that many different crops and you rotate a lot, you actually can maintain soil health and you can maintain low pest populations without using even many of the things that are allowed for organic production. I spray almost no pesticides, even, just by using row covers and crop rotation. And I point that out because I feel the consumers, in general, believe that organic is more than today what the organic standards are allowing and also that we need to continue to educate consumers about sound production practices that maintain soil health and, in fact, build soil.
health because that is really the foundation of organic agriculture.

And so I am going to focus just on bringing consumers to organic, rather than bringing organic to consumers. And by that I mean I hope we don't continue to change organic standards to allow quote cheaper ways to produce it that actually lower that soil health question in the long-run. And it is up to you, analyzing each piece as you go, how you come to your conclusions.

For me, organic in food production, there is science, there is money, and there is soul. And I hope that as you review what you are reviewing, you apply as much soul as you do the final outcome. Because when I look at my hands, and I don't know if you can see them from where you are, there is dirt in these fingers and that dirt has nutrients, that dirt has microorganisms, that dirt has soul. And when you look at something like waterless production, I think you are taking the soul out of agriculture. And if that is the direction you want to go, then I think you are
taking the soul out of organic.

And that is primary what I wanted to speak to you today. Thank you.

CHAIR RICHARDSON: Thank you, Dave.

Questions for Dave? Thanks very much.

MR. ZUCKERMAN: Thank you.

CHAIR RICHARDSON: We appreciate your comments.

The next speaker is Orlando Rojas, followed by Sam Shaffer Joel.

INTERPRETER: I am going to translate for Mr. Orlando. As a matter of fact, he is the first organic grower that I met in Costa Rica myself. So, I am very happy to be translating for him right now.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: Good afternoon.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: He is Orlando Rojas from Costa Rica.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: He represents a small
group association. It is not a cooperative that Christian is heading. It is another small association of growers.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: Agronorte is the name of his association.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: They are a group of 20 farmers with 50 hectares of organic pineapple.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: And for the last years, they have been in business for ten years now and they have been able to comply with all the stringent requisites of organic pineapple with hard work and dedication.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: What is mentioning right now is that the efforts that they have done as a small producers have allowed them to comply with stringent standards of the U.S. and the EEU for the expert of organic pineapple.

MR. ROJAS: (Foreign language spoken.)
INTERPRETER: With this hard work for the last ten years, they have been able slowly to consolidate themselves as a group that can benefit from the opportunities of the export markets in countries like the United States and Europe.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: One of the key and fundamental issues for him to be able to maintain a constant volume of product has been the use of ethylene in the growing of the organic plantations.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: Ethylene has been fundamental for the flourishing of the organic pineapple in the fields.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: As Nestor was saying, that he is building upon his comment is that when he is using ethylene, he is able to have a more robust and more uniform fruit that complies with the standards of the international markets.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: It is important for all
of you to know that in the last years that they have been in operation, no one, not one single person has had any problems with health, safety, or whatsoever, with the use of ethylene in the fields.

MR. ROJAS:  (Foreign language spoken.)

INTERPRETER:  Well, it is part of their motto to be able to maintain a balance between the production and the protection of the environment. So, under those standards of this association, they are mentioning the importance of the use of ethylene again under these schemes.

MR. ROJAS:  (Foreign language spoken.)

INTERPRETER:  Today, this firm, and your friends on the Board decide to take away the ethylene out the production of organic pineapple, it would oblate me and all the organic producers of organic pineapple in Costa Rica --

MR. ROJAS:  (Foreign language spoken.)

INTERPRETER:  -- to give to somebody the keys of the farms of all of these people because this measure make us close our businesses.

MR. ROJAS:  (Foreign language spoken.)
INTERPRETER: I say this with a lot of respect. He says this with a lot of respect but he is pointing out that it is important for all of you to know that what we have in stake here is the food on the table of their kids.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: This is not my only way of thinking.

MR. ROJAS: (Foreign language spoken.)

INTERPRETER: Well, he is saying that this is also the views, shared views with all the members of Agronorte and that, well, he believes that you should take this into consideration as well.

CHAIR RICHARDSON: (Foreign language spoken.)

Are there questions from the Board members? Questions? No? Thank you. Thank you very much.

INTERPRETER: Thank you.

CHAIR RICHARDSON: The next speaker is Sam Shaffer Joel to be followed by Jerome Rigot.
All right, we have lost Sam. Jerome, are you there? Thank you very much.

MR. RIGOT: Hi. Hello, my name is Jerome Rigot. I am a pollution analyst for The Cornucopia Institute. I would like to make general comments about the celery powder.

Synthetic nitrates or nitrites are commonly used to cure meat. However, because synthetic nitrates are not allowed in organic production, celery powder is used as an alternative.

Celery powder produced by chemical intensive agriculture contains artificially induced high levels of nitrates from synthetic source and should be considered as a synthetic compound. Specific variety of celery is selected for its ability to create nitrates and the tissues are grown to produce the celery powder that would be used to cure organic meat products. The crop is extensively fertilized with synthetic nitrates, which are stored in the plant tissues. The celery powder obtained from the plant particularly is
basically the synthetic nitrate from the fertilizer used to grow the crop. This is why we suggest that celery powder should be reclassified under 605(b), allowed synthetics.

The evaluation of celery powder must take into consideration the resulting health and environmental hazard associated with the use of pesticide in the nonorganic production of celery. Several toxic pesticides, such as neonicotinoids, as well as organic phosphate and synthetic insecticides are used on celery crops and their residues will end up concentrated in the powder used for curing organic meat products.

Nitrates and nitrites have no negative health effects. Nitrates, when used to cure meat products, are actually converted in this fermentation process to nitrites, which are the active components responsible for the curing of the meat.

Under high heat conditions, like frying of bacon, or high acid conditions, such as exist in the stomach, nitrates will convert to
nitrosamines, carcinogenic compounds.

However, the Handling Subcommittee did not address any health concerns associated with nitrates intake and none of the comments in support of the use of celery powder even mention the known negative health effects associated with dietary intake of nitrates or nitrites.

Actually today, there is a WHO report that came out and the report adds comparing cured meat products, the least of cancer-causing agents. That is just today.

No TR was ever compiled for celery powder. A TR would help assess the safety of celery powder and the availability of a viable alternative, organic or not. The TR would also help betterment the current availability of organic celery for the production of celery powder, which must be further investigated.

Apparently, there are no viable alternatives for conventionally grown celery powder and in consideration to potential hardship to organic farmers, The Cornucopia Institute
supports celery powder reclassification to 205.605(b), synthetic alloweds.

In addition, Cornucopia calls for additional research to develop a viable organic alternative within the next five years.

Thank you for your attention.

CHAIR RICHARDSON: Thank you very much. Any questions from the Board? Thank you.

MR. RIGOT: Thanks.

CHAIR RICHARDSON: The next speaker is Dave Folino. Dave are you here? And following Dave will be Mabell Rivas.

MR. FOLINO: Hi. My name is Dave Folino and I know Jean because she inspected our sugar bush a number of years ago.

I am an organic maple syrup producer from about an hour south of here. We tap 15,000 maple trees and generally make between 5,000 and 7,000 gallons of syrup a year. But I am not here to talk about my own operation.

What I would like to discuss is trying to reduce the fragmentation of organic standards
for maple syrup across the maple producing regions of the United States.

Maple syrup is made from wild trees throughout the northeastern part of the U.S. and the southern northeast part of Canada. Most of it is made in Canada but the United States is gaining ground on Canada, in terms of worldwide production.

In the United States, Vermont leads production followed by New York and Maine but all of the prominent regions in the United States have different organic rules. So, none of the producers play by the same rules, if they come from a different state. Things such as how big the trees need to be when you tap them are different and a number of other very more technical things.

So, even though the syrup could end up in a barrel and could end up ten miles from here in a big warehouse, if it comes from one of the different regions, it will all be labeled organic, it will all be sold probably for the same price, and it will all be made under different organic rules.
So, my request, and I appreciate the opportunity to speak to the Board, is that if there could be some way that the rules could be harmonized and standardized in a national way, it would even the playing field for all the producers. Right now, it is a big hodge-podge. Almost every prominent state has their own rules. Canada has different rules. Canada's are in metric system, so that makes their trees happen to be that their trees are smaller because the metric system, a nice unit, was 7.8 inches instead of 9 inches. I mean just little things like that but they make a big difference.

That is basically what I would like to ask for and any help that I could give in that effort, I would be happy to do. I'm not even doing this for myself. We sell almost all of our syrup directly to consumers and we don't even put any into a barrel and we are not too worried about selling our crop.

CHAIR RICHARDSON: Thank you very much, Dave. Are there questions, comments? Yes,
MEMBER CHAPMAN: To clarify, when you say, and I am talking within the U.S. not about Canada, when you say there are different standards by different regions, you are meaning standards in addition to the current NOP Organic Standards vary from state to state?

MR. FOLINO: Yes, they do. Places like Maine, Massachusetts, New York State, and Vermont, all have their own rules and they all differ in a lot of small ways.

MEMBER CHAPMAN: Related to maple production or organic maple production?

MR. FOLINO: Organic maple production.

CHAIR RICHARDSON: Yes, just to clarify, the Vermont Organic Farmers has what are called Maple Syrup Production Guidelines because there isn't a specific NOP rule that covers the maple syrup. Therefore, Maine has their own and New York and so on. So, there is a lack of consistency in certification.

MR. FOLINO: That's exactly right.
CHAIR RICHARDSON: So that will be something I hope which will be being addressed. And I am assuming that you are working with VOF to bring that to the attention of the NOP.

MR. FOLINO: Yes.

MR. MCEVOY: Yes, it sounds like there is one organic standard, so all of these certifiers should be following the same USDA organic regulations. If they have additional requirements, then it is -- I'm a little lost on how that is possible. So, we will talk to you and get some information from the certifiers on this particular topic.

I know that Canada, in our equivalency discussions with them, we meet with them on a regular basis, have requested that there are more specific organic maple requirements in the U.S. for purposes of equivalency. But it is like there are many parts -- many things that are certified under the general organic regulations, mushrooms, in particular, aquiculture, where we are still working on putting the recommendations from the
NOSB into more of a regulatory context. But I don't think the NOSB has ever looked at a standard for organic maple production. They have? No, they haven't. Okay.

So, maybe another thing for the work agenda.

CHAIR RICHARDSON: Our work agenda gets longer. Thank you, David, for your comments. They are very much appreciated.

MR. FOLINO: Thank you very much.

CHAIR RICHARDSON: The next speaker is Mabell Rivas, of QAI, followed by Tyler Smith.

MS. RIVAS: Hello, Mabell Rivas, Senior Reviewer at QAI.

Since 1998, I have been working for organic certifiers, throughput users, and processors in the U.S. and Latin America. Thank you for the opportunity to comment on behalf of QAI.

First of all, I would like to recognize and thank this Board for the extraordinary that it has done working through the sunset list. I found the information provided in each NOSB proposal to
be informative, detailed and comprehensive.

Thank you also for your efforts that you have put into the new ancillary substances proposal. We appreciate it, the general approach that you have taken with it.

The idea of establishing function of classes is a good one. It is important, however, that the process for petition of additional function of classes be well spelled out. Also, we would like to say good job on function of classes for pectin. We compared what is in the proposal with the spec sheets that are in our records and the function of classes proposal are accurate.

Let me quickly touch on the specific materials that we have addressed in the written comment. Flavors. We concur with OTA that the level of certain flavors in organic form has increased, as the industry has grown. However, keep in mind that nonorganic, non-agricultural flavor ingredients used in the making of organic certified flavors are not, to our knowledge, available. These flavor ingredients are
currently be approved based on the listing of flavors in 605.

The requirement of violating commercial availability for organic flavor manufacturers might not be a very sound and sensible approach but more of a paper chase.

Tocopherols. We feel that there is not enough information to tell with certainty that the tocopherols are being used, although they derive from natural oil, should be deemed non-synthetic.

Let's first finalize guidance on classification of materials and then get to work on moving materials from 605(b) to 605(a).

There are two new points that I would like to make here today. First, regarding humic acid. There are 17 QAI clients using humic acid. Humic acid appeared to be a great tool for increasing soil organic matter one of the basic principle for organic farming. Based on the background of discussions you have had, it appears that there are some concerns related to the use of synthetic extractions processes.
Then, let's work on classification of material final guidance and then assess whether further restrictions should be applied to this material.

And I would like to close with this general comment. In the spirit of sound and sensible, we encourage consistency of criteria whenever possible when assessing different uses for a material across the production chain. In some situations, we, as a certifier, find ourselves on the fence of our materials that are approved for certain functions but not for others.

For example, ozone gas, a naturally occurring substance currently allowed for the cleaning of an irrigation line but not but is disallowed for contacting with soil. Ethylene gas might be in a similar situation. It seems that the NOSB members has released it for crop production but not for use in post-harvest handling.

CHAIR RICHARDSON: Thank you very much. Questions? Tom.

MEMBER CHAPMAN: Can you explain further
what you meant by the flavor proposal not being sound and sensible?

MS. RIVAS: Yes. Like I said in my comment, currently, organic certified flavors, some type of flavors, are composed of nonorganic, nonagricultural flavor ingredients. And right now was as the certifiers the way we assess those is based on the annotation of 605.

So, if we are changing the annotation to request commercial availability, we are talking her about organic flavor manufacturers, it may not be a sound and sensible approach because those flavor ingredients are not available in organic form, to our knowledge.

MEMBER CHAPMAN: Yes. So, are you speaking about the flavoring constituents' portion of the flavor?

MS. RIVAS: Yes, I am talking about organic required flavors. We certify organic flavor manufacturers. Correct.

MEMBER CHAPMAN: And is your comment specifically about the flavoring constituent
portion or the non-flavoring constituent portion of the flavor.

MS. RIVAS: For the flavor constituents. Those will fall under the listing of 605.

MEMBER CHAPMAN: So, you are saying it is a paper chase or potentially paper chase for an organic flavor that is organic because it is 95 percent organic alcohol and five percent some other flavor constituent.


MEMBER CHAPMAN: Okay, thank you.

CHAIR RICHARDSON: Other questions? Thank you very much.

MS. RIVAS: Thank you.

CHAIR RICHARDSON: The next speaker is Tyler Smith to be followed by Julie Weisman.

MR. SMITH: Good evening. My name is Tyler Smith. I am an epidemiologist and environmental health scientist with Consumer Reports Food Safety and Sustainability Center. I
oversee their food safety testing.

Earlier today, my colleague, Dr. Rangan, mentioned our commitment to sustainable agriculture and the importance of organic farming to sustainability. Indeed, many of our tests have repeatedly found that more sustainable, often organic, food is safer or offers substantial value to consumers compared to conventionally produced food and we frequently recommend that consumers choose organic food options, when available.

In fact, most recently, tests published in the October issue of Consumer Reports found that ground beef that was organic grass fed and/or raised without antibiotics was half as likely as conventionally produced ground beef to carry MRSA or bacteria that are resistant to three or more classes of antibiotics.

Importantly, we found that even more sustainably produced beef, that is beef that is grass fed and raised without antibiotics, was one-third as likely as conventionally produced ground beef to carry these bacteria.
So, in our beef report, which is available on the table out there for free, we recommend that consumers choose organic grass fed beef whenever possible and I encourage everyone to take a look at the report.

We strongly believe that organic is an important foundation for sustainable agriculture. And indeed, we hope that the NOSB will use this meeting to build upon that foundation. There are several important opportunities on the agenda related to what I just mentioned, although in a different species. It concerns us that antibiotics can be used in hatcheries in day-old chicks that will be raised as organic, even when research clearly links this practice to the emergence and spread antibiotic resistance. And we hope that the NOSB will take up this issue at this meeting as we have been informed by Secretary Vilsack that they will.

It is also important that the NOSB review the safety of so-called inert ingredients prior to their inclusion on the National List.
review of synthetics prior to their inclusion on the National List is critical to organic integrity, as well as consumer trust in the organic label.

We, therefore, disagree with the Crops Subcommittee's proposal to replace this review with the EPA's Safer Chemical Ingredients List. Instead, we urge implementation of the NOSB recommendation adopted unanimously in 2012 to independently review synthetic materials identified as inert or other ingredients in pesticide products used in organic production in a transparent fashion. We believe that the list can serve as a way to prioritize review, as we understand resources can be limited but it should not be a replacement for NOSB review. Thank you very much.

CHAIR RICHARDSON: Thank you for your comments. Questions?

And it is my understanding that we will be getting on the work agenda the day-old chick issue for antibiotics.

MR. SMITH: Wonderful. Thank you very
much.

CHAIR RICHARDSON: Thank you.

The next speaker is Julie Weisman and last but not least will be Gwendolyn Wyard.

MS. WEISMAN: Deputy Administrator McEvoy, Chairperson Richardson, and members of the National Organic Standards Board, thank you for the opportunity for letting me comment. And thank you also for your service, especially to those of you for whom this is your last meeting. I remember what that feels like.

My name is Julie Weisman and I am speaking today as a representative of Elan, which is a producer of both organic and nonorganic flavors and flavor ingredients, especially organic vanilla. Flavorganics is a national brand of certified organic flavors, flavor products for home use. And along with our affiliate, Natural Flavors, Inc., we have been making certified organic flavors since 1997.

I have been an organic consumer for the past 30 years and as a former NOSB member and past
chair of the Handling Committee, I am intimately familiar with the issue and the process that you are engaged in.

My request is short and simple, that flavors be relisted on 205.605(a) and that the annotation of flavors, such as the OTA petition was for, be amended to require those using nonorganic flavors to demonstrate why they couldn't use an organic flavor and that is really it.

I know it seems strange that as a major supplier of organic flavors, I would be imploring you to bless the continued use of an ingredient that competes with my own but here is why. Flavors, nonorganic flavors are essential to the continued sales of the majority of organic agriculture products grown and raised in the U.S. The fact of the matter is that the glass half empty view is that most organic certified products that use flavors only 20 percent of them use organic flavors and 80 percent of them do not. So, if you let flavors sunset, I think that would be a train wreck for this industry over an item that is present in organic
consumer products in concentrations of less than
four-tenths of a percent.

And the reason why is because there is
not a sufficient supply of all the organic raw
materials needed to replace those that would be
lost. And developing new organic ingredients,
which I have been involved in, is a long dance
between the developer and the marketplace. It may
be possible, theoretically to develop a process to
make an agreement as certified organic and that
doesn't mean that companies capable of making such
an ingredient are inclined to do so.

And secondly, as the previous commenter
pointed out, organic flavors, themselves, would be
at risk and I guess it is not so shocking at this
point but certified organic flavors do rely, to a
small degree in volume, but a large degree in taste
impact on ingredients that are considered flavors
non-synthetic.

I also think that moving them to 606 is
not a solution. You can ask me why later. I think
that the combination, as I said before, of
relisting them and including an annotation is the most workable solution to the problem. Thank you for your time and for letting me make this comment.

CHAIR RICHARDSON: Thank you Julie.

Do we have questions for Julie? No. Thank you very much.

The last speaker of the day, I think. Is she the last one? You mean we don't have any more after this?

Okay, Gwendolyn, you are up.

MS. WYARD: Good evening Madam Chair, NOP staff, and ladies and gentlemen of the gallery, and they are dwindling.

My name is Gwendolyn Wyard and I serve as the Senior Director of Regulatory Affairs for the Organic Trade Association. Three minutes is but a fleeting amount of time and we have submitted extensive written comments. So, I am going to take this opportunity to just say a few words about OTA's petition on natural flavors and answer any questions that you may have.

First off, the Organic Trade
Association firmly believes that the National List should continue to reflect the best and least toxic technology our food system has developed. We are also fully committed to the development and use of organic seed and to the development and use of organic ingredients and processing aids that are currently allow in nonorganic form.

It is for this reason that we submitted our petition to require the use of organic flavors when they are commercially available, and more recently convened the OTA National List Innovation Working Group.

In 1995, when NOSB made its recommendation to allow natural flavors in organic products, there were zero certified organic flavors. In 1995, the Board anticipated that organic flavors were possible. And, accordingly, drafted additional language that would push the industry to work towards the development of organic flavors. Unfortunately, that part of their recommendation was not adopted by NOP.

Regardless, today, we have over 2,146
certified organic flavors and over 189 certified suppliers, based the 2014 ACA survey. This progress was made without any requirement to use organic flavors. All use at this time is voluntary. So, can you imagine where we can go if our petition is adopted?

The Handling Subcommittee states that our petition does not go far enough and that we need to push the industry along the lines of the 1995 recommendation.

We absolutely agree that our work is not done but I want to clarify that our petition not only captures the 1995 recommendation but it actually takes it a step further by requesting a mandatory requirement to use certified organic flavors when they are available. Keep in mind that the 1995 recommendation did not require certified operators to use certified organic flavors. It simply required operators to demonstrate in the organic systems plan, the efforts being made towards the ultimate production of a certified organic flavor.
In 1995, certified organic flavors didn't exist. So, that recommendation made sense at that time.

But we are way beyond the days of demonstrating efforts to produce an organic flavor. That is so 1995. The flavor houses have that covered.

In 2015, when over 2,000 certified organic flavors are available, certified operators simply need to be required to use organic flavors, if they are available.

From here on out, we need to ramp up the supply of organic flavors, get certifiers additional guidance and training on carrying out commercial availability requirements and bring fair and consistent enforcement to the process.

In closing, OTA drafted a petition that we believe will work within the constructs of current certification system and the current supply of organic flavors. To vote no on the Handling Subcommittee's proposal is a no vote to progress. Thank you.
CHAIR RICHARDSON: Thank you Gwendolyn. Questions? Tracy.

VICE CHAIR FAVRE: I guess I am a little confused about the reluctance to vote in favor of this proposal, given, as I understand, if organic flavor is not available, then they are allowed to use conventional.

So, can you speak to that a little bit? We are getting comments back from some folks that there is dire consequences if we do this, blah, blah.

I don't mean to demean that. I'm just saying it is a very complicated issue and I am curious.

MS. WYARD: Explain to me one more time what the reluctance is to say to adopt the proposal?

VICE CHAIR FAVRE: Well, we have received public comment that indicates people are reluctant for us to adopt this proposal because of concerns about that.

MS. WYARD: Well, it is going to take additional work. There is no question about that.
It is going to take additional time and it is going to take additional resources. It is going to bring everybody up to a level playing field.

Right now, there are companies that have been using certified organic flavors, and I am talking we are ranging from simple extracts that are just made using peppermint leaves and alcohol, to more of your compounded flavors that we have heard mentioned today where you have alcohol and flavor constituents and organic concentrates. There is a broad range of flavors and, in some cases, it is going to be straightforward, but everybody is going to have to do a little bit more work so that everybody is at the same level. The company right now is taking all the time and resources to source and use organic flavors. Now, everybody is going to have to do that.

So, I think it is the reluctance to change and the additional work that it is going to take but I don't think we can continue to have all of these companies and all these flavors that are being used by some and not others. If you look at
all of the time and effort that is being spent on looking for ingredients to come off of 205.606 when you may only have one supplier, you know, and very limited availability, this is -- you know I started commenting in favor of requiring commercial availability for organic flavors in 2004. This is what, my 26th time being here? It is just time we do this.

It is the right thing to do. And I get that it is going to take a little extra work.

CHAIR RICHARDSON: Tracy, follow-up?

VICE CHAIR FAVRE: Yes. So, how do you address the comments that we have received that for certain formulations, certain flavor formulations have to be used. Can you speak to that?

MS. WYARD: So, I have heard there are some flavors that are certified organic because they contain 95 percent certified organic agricultural material. Now, if they are being labeled as an organic flavor, there is going to be some organic flavor component in there. And there are some labeling issues that I believe is going
to need to be addressed by NOP but it is a separate issue and I really don't want to see that get in the way of certified organic flavors and the petition that we are submitting.

But what is going to happen is that this requirement to use organic flavors is also going to apply to the flavor houses. So the flavor house right now is making a certified organic flavor and they are using a natural flavor when there is an organic flavor that is out there, they will have to use it, too. So, it is going to push everyone towards the ultimate production of an organic flavor that is 99.9 percent organic. You are going to have maybe citric acid or tocopherol, or some of these other nonagricultural 605 ingredients in there. It might never be 100 percent organic but it is going to push everyone towards the ultimate production of a flavor that contains close to 100 percent organic everything, agricultural components plus organic flavors.

MEMBER AUSTIN: Thank you, Jean.

MS. WYARD: Oh, good. I was going to say take down my infographics so that I can see.

Hi, there.

MEMBER AUSTIN: Over here. Did you ever think that you would see this day come, that we would be communicating at one of these meetings in this manner?

MS. WYARD: Absolutely.

MEMBER AUSTIN: I figured we would see pigs fly first, but yet, here we are.

My question: Why do you think that the NOP did not include the NOSB’s 1995 recommendation to require organic in the final rule?

MS. WYARD: Well, I think probably NOP is going to be the best ones to answer that. And so I am going to invite you to step in.

But I will take a shot at my thoughts on it because I think it is important to the genesis of this issue. Miles, with your permission, or I can just turn it over to you.

MR. MCEVOY: I have no idea.
MS. WYARD: Okay. Well, then I will take a shot at it.

I don't think it was to inhibit progress towards the production of organic flavors. I don't think that was it at all. I think the issue is that flavors were put onto the nonagricultural list. The nonagricultural list was created because in process products you have these minor ingredients that are essential to a process product but you can't get them in organic form, period, because they are nonagricultural and the regulations certify agricultural products.

So, they wrote a recommendation for flavors that were put on the nonagricultural list and I am envisioning the general counsel and the lawyers that are looking at the rule as it is being written and they are scratching their heads, going we are going to require operators to write up descriptions in the organic systems plan, demonstrating their efforts to produce an organic flavor when it is being listed as something that can't be organic. I think they just ran into a
technical SNAFU and did the best they could.

CHAIR RICHARDSON: All right, that is the only answer you are going to get, Harold. And I should note for the record that Harold Austin has his third set of clothes on for the day. The record should show the rest of us have had to stay in our outfits all day. And he probably just has running trunks on underneath. So, who knows.

MS. WYARD: Thank you everyone so much for your time and all of your service.

CHAIR RICHARDSON: Okay, thank you, Gwendolyn.

All right, that brings us to the end of today's presentations and public comments. And we look forward to seeing you again here at 8:30 tomorrow morning.

(Whereupon, the above-entitled matter went off the record at 6:24 p.m.)
UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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FALL 2015 MEETING

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TUESDAY
OCTOBER 27, 2015

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The Board met in the Pinnacle Room of the Stoweflake Conference Center, Stowe, Vermont, at 8:30 a.m., Jean Richardson, Chair, presiding.

PRESENT
JEAN RICHARDSON, Chair
TRACY FAVRE, Vice Chair
HAROLD AUSTIN, Secretary (via Skype)
CARMELA BECK
COLEHOUR BONDERA
TOM CHAPMAN
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, National Organic Program

LISA BRINES, National List Manager, National Organic Program

EMILY BROWN ROSEN, Agricultural Marketing Specialist, National Organic Program

PAUL LEWIS, Director, Standards Division, National Organic Program, USDA

SAM JONES, AMS Public Affairs Specialist

MILES MEVOY, Designated Federal Officer, Deputy Administrator, National Organic Program
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Adjourn
CHAIR RICHARDSON: Good morning everybody, I'm very pleased to start this morning's meeting. A bright sunny morning, about 25 degrees out there when I woke up this morning. Just lovely, sorry for you folks that live in warmer climates. It'll be sunny all day so take advantage and zip up over the Notch at lunch time if you can, because it's going to rain tomorrow and the Notch is open, so it should be beautiful to see the sort of leaves on the trees.

The first thing I'd like to do this morning is introduce to you Jenny Moffitt. She's the Deputy Secretary of the Department of Food and Agriculture from the great state of California. Jenny.

MS. MOFFITT: Hi, good morning, Dr. Richardson. I'm glad to be here in one of my most favorite states, of course besides California. And to be here to speak at the National Organic Standards Board.
First off I just want to thank you for all of your hard work and dedication. I know it takes a lot of time. But I appreciate, and I think the organic industry really appreciates the work that you guys do on behalf of the community.

This past January, Governor Brown, appointed me as the Deputy Secretary for the California Department of Food and Agriculture. But most people here in this room know me as an organic farmer. Born and raised on my family's organic walnut farm, I am a proud fifth generation California farmer. But I'm an even more proud organic farmer.

At CDFA, I work on policy related to climate change, water, land use. But organic is really where my heart is. And it's an important industry to California and to CDFA. According to USDA's 2014 organic survey, California is the largest organic producing state with over 40 percent of all organic production in the nation.

Our 2800 California organic farmers and ranchers account for 2.2 billion in organic sales.
California is unique in that we are the only state that has a nationally accredited state organic program. As such, California is responsible for adopting and upholding the National Organic Standards.

Since 2003, the State Organic Program has worked alongside organic producers and the California Organic Products Advisory Committee also called COPAC, to ensure consumers can trust the integrity of the organic claim.

Often members of CDFA's COPAC are also members of the National Organic Standards Board. For instance, we have Tom Chapman as both a member of COPAC and NOSB.

The State Organic Program staff and the state's network of county agricultural commissioners are responsible for verifying that organic certification, offenders, and Farmers Markets, conducting an unannounced inspections of operations.

We also sample organic products for pesticide residue testing. We conduct complaint
investigations. Last year we conducted 85 investigations alone. And we process appeals and provide due process.

As Melody Meyer, who is Chair of COPAC, mentioned yesterday, CDFA just announced the launch of a GMO testing pilot project for organic products. The goal of this pilot project is to gather data to determine presence, and if present, the level of GMOs in organic products sold in California. These results will help inform us on next steps.

CDFA also has an Organic Input Materials Program. In 2010 the state of California passed legislation establishing an Organic Input Material Program within CDFA's Fertilizing Materials Inspection Program. This legislation was designed to address concerns about the integrity of fertilizing materials marketed for our use in certified organic growing.

The organic material program registers for licensing materials to be used organic crop production. We maintain a list of approved
organic input materials or OIM products on our website. We also maintain a database that includes the status of all approved and in process applications.

All OIM labels are required to be reviewed and registered with CDFA before they can be marketed in California. The program's scientific staff performs extensive scientific review of OIM product source ingredients and manufacturing processes and ensures that the product meets the USDA National Organic Standards.

In addition, each OIM manufacturing facility is inspected annually by the field staff, and samples are taken at various stages of the manufacturing process to validate label claims and guarantees. This new program was implemented in January 2012.

Dale Woods is here with me today, and he manages the program. Currently, over 1500 OIM projects are registered with CDFA and the program has inspected 150 OIM manufacturing facilities. The OIM program was ISO-17065 accredited just this
past January by USDA AMS.

We're here for the rest of the week, and we're happy to talk with you more about the program. Pull me aside or pull Dale aside, and we'd love to talk with you guys more about that. But again, I wanted to thank you guys for your commitment, for your time, and for your energy serving on this Board. Thank you.

CHAIR RICHARDSON: Thank you very much for your comments. Are there any immediate questions from the Board? You'll be with us this evening I hope?

MS. MOFFITT: Yes.

CHAIR RICHARDSON: At the reception. Okay, thank you very much.

First of our public comment speakers this morning is Maddy Monty, from NOFA Vermont. If you'd like to come up Maddy? And she'll be followed by Vern Grubinger. For those of you who are new here today, weren't here yesterday. We do have a seat up here behind Michelle Arsenault, who is our -- the person who does all the work here and
makes everything function actually, up near the microphone.

If the person who's sort of on deck, would like to come up there, then we can move along as quickly as we can do. And each of you will notice that there are little lights that come on. Michelle, can you explain those lights again, I can't remember exactly how they go?

MS. ARSENAULT: Yes, so there are three lights on the timer on the podium. Red, yellow, and green although it looks orange to me. The orange light will come on when you have one minute left of your three minutes. And it will blink obnoxiously. And then when the timer goes off, it's very loud and obnoxious. And you'll know your time is up.

CHAIR RICHARDSON: Thank you.

MS. ARSENAULT: And there's also a remote on the podium, so if you have a PowerPoint presentation, you can advance your slides yourself. The right and left arrows will do that.

MS. MONTY: Thanks. Good morning.
I'm just going old school with the pad of papers today. My name is Maddy Monty and I'm here today on behalf of the Northeast Organic Farming Association of Vermont and our roughly 1300 members throughout Vermont and other northeast states.

I appreciate this opportunity to provide comment to the Board. I'd like to share comments today on two general topics including the certification of hydroponic operations and GMO prevention guidance.

NOFA Vermont supports the Board's 2010 recommendation that hydroponic operations be prohibited from obtaining organic certification. We believe the maintenance and management of organic matter in the soil is the foundation of organic farming.

And we request a moratorium on the certification of any new hydroponic operations until the Board is able to review the findings of USDA's newly created Hydroponics Task Force. And until NOP puts out a proposed rule based on the Board's 2010 recommendation.
The longer NOP waits to clarify this policy, the more hydroponic systems will become certified and the harder it will become to institute a change. So again, we would like to see action on that issue in accordance with the NOSB's 2010 recommendation.

Secondly, we feel the prevention of GE contamination is a very critical issue to Vermont's organic farmers and those throughout the country. We appreciate the good work the Board has done on this subject up to this point but feel that much more still needs to be done.

The responsibility to prevent GE contamination must not continue to fall solely on organic producers. And we request that USDA and NOP develop a Memorandum of Understanding that agrees to require GE growers and patent-holders to adhere to mandatory contamination prevention measures.

And that's all I have for today, and I'm happy to answer any questions that there are.

CHAIR RICHARDSON: Thank you, Maddy.
Are there questions from the NOSB? Yes, Nick.

MEMBER MARAVELL: Do you have a draft of such a Memorandum of Understanding?

MS. MONTY: I personally haven't seen a draft of such an MOU, but I'd be happy to reach out to our partner organizations; NOFA is a participating member in the National Organic Coalition. And I know that this is something that they have supported in their comments as well, and I'd be happy to check in with them and see if they have drafted such a memo.

MEMBER MARAVELL: That would be good, and forward it to the Board.

MS. MONTY: Okay.

CHAIR RICHARDSON: Tom has a question.

MEMBER CHAPMAN: I understand your concerns with hydroponics. Do you have similar concerns with greenhouse operations?

MS. MONTY: No, I wouldn't say that NOFA has similar concerns about greenhouse operations that are growing in soil mediums. Our concerns are primarily around soilless mediums and
hydroponics in particular.

CHAIR RICHARDSON: Thank you very much, Maddy.

MS. MONTY: Thank you.

CHAIR RICHARDSON: Next speaker is Dr. Vern Grubinger, and he'll be followed by Greg Jackmauh.

MR. GRUBINGER: Good morning, I'm Vern Grubinger. I'm the vegetable and berry specialist, University of Vermont Extension, and I've been working with organic farmers for over 25 years in the state and the region. And I wanted to talk about the issue of copper fungicides for disease control in crops.

Currently as it stands, as an extension person making pest control recommendations for some serious diseases such as leaf blight on potatoes and tomatoes, which are really high value crops in this region, we don't have good alternatives to copper.

And copper is marginally effective, but it's really better than anything else we can
recommend. And I want to endorse your research priority to seek out alternatives. But until alternatives are proven, I urge you to keep the fixed coppers on the list.

This past year, we did try and get some other materials into the state that research had shown as pretty effective. The EF-400 is one botanical material, but we were unable to actually get it registered even in Vermont, even though it was 25(b) exempt, as it is supposed to be. And the supply chain just isn't there.

There are also some new materials, the copper soaps coming onto the market, Cueva and others. But the efficacy isn't entirely proven.

So I think the tension that we have is that growers don't want to use these materials. They're very careful when they're applying them, but we have a lot of high value profit stake, and you know they're doing their best to manage them.

The issue of accumulation in the soil comes up and I just wanted to provide some data that we've collected with regard to that. We
summarized the results of 17,200 heavy metal soil test screens that were done at the University of Vermont with pH 4.8 ammonium acetate extract.

And we did this after the flooding with Irene; we were trying to see what kind of metals might have been deposited, but it was sort of fortuitous that we got a reading on copper levels in the soil. And of those 17,000 farms, we could only safely assume many hundreds of them were organic because we had over 150 certified vegetable operations during that time period from 2007 to 2011. And many more that are people that are following organic practices including applying copper for disease control.

So it was interesting to find that 95 percent of these test results had copper levels below three quarters of a part per million. And 99 percent were below one and three quarters. So that just suggests to me that we don't have a widespread problem with copper accumulation resulting from these materials.

And in my written testimony, I'll
submit a newsletter article by Ruth Hazzard, recently retired vegetable specialist at UMass, who also crunched some data looking at the background levels across the state of Mass, and finding that they are only, well they range from .1 to 8 parts per million.

But most of the soils actually could be perceived as deficient in copper for vegetable production. And she did some calculations about how many applications of a standard material like Nu Cop, fixed copper you'd have to apply. And it takes quite a few applications to really get to the level of concern. Thank you.

CHAIR RICHARDSON: Thank you very much, Dr. Grubinger.

Questions? Francis.

MEMBER THICKE: Thank you. What is your sufficiency level for copper considered to be? And what's the toxic level considered to be?

MR. GRUBINGER: Well, it's a good question. We don't actually have an established sufficiency level because a lot of it has to do with
the crop and the soil pH. So mostly we compare it to background levels and try and get production fields sort of at least up to the average background that we find. But it's not a precise recommendation.

And the toxicity level, we don't actually have an established toxicity level. And my understanding is EPA doesn't either. I've looked at New York; it's astronomically large. It's for a residential -- where you would not be allowed to have a residential habitation, it's like 200 parts per million.

CHAIR RICHARDSON: Other questions. Yes, Zea.

MEMBER SONNABEND: Hi. Vern, thank you for your testimony. Two questions, the simple one is, is there a link to that data or your conclusions that you could provide to Michelle, where we can see it on the internet?

MR. GRUBINGER: Yes.

MEMBER SONNABEND: And then secondly, a number of people have suggested additional
annotations to help limit any abuse of copper that might be occurring.

Is there any value you think in an additional annotation such as a maximum amount that could be applied per year, or the one of not allowing a crop, the harvesting crop to turn color because of copper, or any other annotation you think would be helpful? Or do you think it's working okay the way it is with the accumulation restriction?

MR. GRUBINGER: I'd be concerned about the first option of an annual limitation because sometimes the pressure is extraordinary. A couple of years ago we had late blight infested seedlings brought into the region.

And we had outbreaks happening you know months before it was typical. So now you've got a long season of control, which was really the exception to the rule. So it would create problems in a year like that.

Maybe you know an average over many years would make more sense, a five or ten year
period. And certainly requiring monitoring of the soil to see if there's a significant change.

The issue of it on the fruit, I mean with potatoes, not such a big deal. I think with a lot of tomato growers are already going in that direction if they don't want to have to be washing off product. But that would get into, I guess if it's just coloring, that would probably work. But I wouldn't want it to be any fruit present would be the ban.

CHAIR RICHARDSON: Other questions for Dr. Grubinger?

(No audible response)

CHAIR RICHARDSON: So you're going to submit the rest of -- all those materials so that we can get access to them?

MR. GRUBINGER: Yes.

CHAIR RICHARDSON: Okay, that would be great. Articulate as ever, fabulous, thank you very much, Vern.

I should comment to everybody that of course Harold has been online right from the very
beginning. He was online before most people were here in the room, so he's listening in. Even though we can't physically see him. And when he has a question, as yesterday, he'll let Michelle know and we can help him to ask questions.

Unfortunately, he can't always; is the connection good this morning? Yes, okay good.

Okay, the next speaker is Greg Jackmauh, and he'll be followed by Kate Duesterberg.

MR. JACKMAUH: Good morning. My name is Gregory Jackmauh, and I am a resident of Barnet, Vermont and live in pasture-based intensive grazing dairy farm that has been certified since 2003. I graduated from Harvard college with an Honors degree in Biology. And I'm a member of the Cornucopia Institute.

My premise is simple: the word organic has a meaning that has existed long before the USDA began to consider the term. In my 1924 addition of Webster's New International Dictionary, it says organic means, acting as an instrument of nature
and forming a complex self-determined unity.

To me and to many others here today and watching from a distance, this definition is quite easily understood. Organic means a naturally occurring relationship between land, plant, microorganism, and animal that is harmoniously in balance and self-sustaining.

Modern agricultural processes have gotten away from following an organic model throughout the decades and centuries. And there are those of us who passionately feel that returning to an organic approach to agriculture is a critical step to stabilizing our environment and our planet.

The Cornucopia Institute on behalf of organic stakeholders has been documenting flagrant fraudulent activity on factory farms producing so-called organic meat, milk, and eggs. These factory farms are allowed to operate with USDA organic certification even though their practices in no way resemble the definition of the word organic.
These farms damage the reputation of my organic farm and hurt its bottom line. No amount of imagination could picture these factory farms to resemble a system forming a complex self-determined unity. The practices of monoculture and feedlot concentration necessary to sustain these factory farms result in serious environmental degradation, just the opposite of the intended purpose of organic farming.

The USDA should not be in the business of deciding that Daniel Webster had it wrong. They should not be in the business of fighting with sectors of the population over the definition of a word that already has a clear meaning.

It's pretty simple. If your agricultural product is not the output of a sustainable symbiotic biological relationship with the land, then it cannot be labeled organic. It might be natural or anything else we all agree we want to call it.

I think a lot of time and a great deal of confusion and subterfuge has gone into the
organic debate. And not surprisingly, always to
the detriment of those who most easily understand
the definition of organic and believe in its value
toward making us healthier and this planet more
habitable for all living things.

I ask that you turn back the clock and
return to the simple definition of organic and then
go to work to decertify those that are clearly not
deserving of the organic label. Thank you.

CHAIR RICHARDSON: Thank you.

Questions?

(No audible response)

CHAIR RICHARDSON: Thank you very
much. Next speaker is Kate Duesterberg, and
she'll be followed by Christie Badger.

MS. DUESTERBERG: Good morning.
Thank you, Dr. Richardson and to the entire
committee for the opportunity to provide comment.

My name is Kate Duesterberg and I'm the
co-manager of Cedar Circle Farm in East Thetford,
Vermont. My husband Will Allen and I took over the
management of Cedar Circle 15 years ago. We've
been certified organic through BOF since 2003.

Ours is a community farm with a social mission. Our main focus now and into the future is to place regenerative agriculture clearly in the minds of the public as the hope for the future in terms of reversing the disastrous trajectory of climate catastrophe that is due in no small part to industrial farming systems.

We believe that regenerative farming practiced on a massive scale can sequester enough carbon worldwide to actually reverse climate change. This is a movement that is growing rapidly. For example, we attended a workshop on Sunday organized by NOFA Mass whose aim was to teach farmers how to make a transition to no-till organic vegetable production. The interest in this topic was clear by the fact that there were over 80 farmers present, young and not so young.

My hope today is to encourage you as the implementers of the federal program originally established to encourage more and better organic farming in the U.S., to take a leadership role in
helping farmers to move toward more regenerative farming practices that can sequester carbon.

You are well aware that Vermont was the first state to pass a law to label GMOs in processed food products. Even though that law is still tied up in the courts, it is an example of how a group of dedicated farmers and conscious consumers can make a difference at the policy level.

Organic farmers firmly believe that the original decision of the Organic Foods Production Act to eliminate GMOs from the defined organic standards was the right decision. We are committed to organic farming practices that use the biology of the sun and the soil to produce quality crops.

However, we see in the proposal for this week's NOSB discussion entitled Prevention Strategy for Excluded Methods that organic farmers are expected to shoulder the entire burden for preventing cross contamination from their neighbors who are using GMOs.

USDA estimates that 96 percent of the
corn crop in Vermont is genetically modified. Corn is grown on 92,000 acres in Vermont out of a total of 120,000 tillable acres across the state. So it is likely that many of the organic farmers are in close proximity to GMO crops.

Under the proposed rules they will need to make sure that the timing of their sweet corn, when their sweet corn tassels and pollinate does not coincide with the time that their neighbors GMO corn tassels and pollinates.

In addition, we are in a crisis in our country with bees suffering from colony collapse, which many researchers have determined is related the neonicotinoid seed treatments that are on every kernel of GMO corn seed.

How can we possibly prevent our bees from collecting pollen from our neighbors fields, especially when neither their neighbors, nor the Vermont Agency of Agriculture required to share the information about what kinds of GMO crops are planted and what their pollination dates are?

The point is that the idea of organic
farmers having to take on the responsibility of preventing cross-contamination makes no sense. The burden should most clearly be on the polluter. Thank you for your consideration.

CHAIR RICHARDSON: Thank you very much, Kate.

MS. DUESTERBERG: Thank you.

CHAIR RICHARDSON: Are there questions for Kate on any of these topics? Yes, Colehour.

MR. BONDERA: Thank you, Kate, for your testimony. My question goes back to the beginning of what you were talking about, and I would like for you to expand a little bit on it in terms of regenerative farming is what you were referring to. And I'd like you to expand at least briefly on your perspective of how regenerative farming is associated with organic agriculture? Thank you.

MS. DUESTERBERG: A lot of people are thinking that regenerative farming practices are more than just your standard organic practices, that regenerative practices have more to do with
really building up the soil fertility, and rather
than trying to use for example tillage methods to
control weeds, you use better compost adding to the
soil to make your soil life more prolific. So that
that takes care of your weeds and your pests more
effectively.

And some of the things that we would
prohibit under the organic standards, better --
building up the better soil life, or some of the
restrictions on compost applications for example,
the temperature requirements and so on, go to the
fact that then the compost has less soil life in
it than it would if it were lying it earlier.

So there are some restrictions within
the USDA Organic Standard systems that prevent more
regenerative practices from gaining life.

CHAIR RICHARDSON: Thank you very
much. Other questions? Okay, thank you.

The next speaker is Christie Badger,
and she'll be followed by Stephanie Rodriguez
Hidalgo.

MS. BADGER: Good morning. My name is
Christie Badger, and I'm speaking today on behalf of the National Organic Coalition. Thank you for the opportunity to be a part of this exciting process, and thank you for the important work that you do to further strengthen the organic label.

NOC appreciates how important the policy and procedure manual is, and we're glad that the NOSB has taken back control of what is in the PPM. We believe in the substantial transparency that the FACA process provides.

We have major concerns about the changes in the PPM that seem to shift to the more limited FOIA based process for providing public access to NOSB documents and communications. Instead of using the FACA procedures currently in place.

We wish we could have understood the issues and changes better and would respectfully request that a document that shows changes, both additions and deletions, is put forward. In addition, we would request that changes are accompanied by an explanation as to why those
changes are being made. We strongly believe that this is the only way to maintain transparency.

Regarding conflict of interest, NOC recommends that the USDA and NOP require subcontractors and the subcontracting agency they represent, as applicable to disclose interests and sign a COI form prior to signing a contract.

We further recommend listing the name of the author writing the TR or TAP and the subcontracting agency they represent on the front page of the report. This affords organic stakeholders full transparency when reading the reviews.

NOC concurs with the crops subcommittee that the annotation for micronutrients should include other methods to determine deficiencies in addition to soil testing.

In addition, we feel that the application of synthetic micronutrients should be used to address acute short-term fertility imbalances in conjunction with organic practices to correct deficiencies, such as crop rotation,
cover cropping, and adjusting the soil pH.

With these points in mind, we submit relisting the material but modifying -- we support relisting the material but modifying its annotation to read, "Deficiencies must be documented through verifiable site-specific methods and accompanied with a plan for future correction of the deficiency."

In order to eliminate the incentive to convert native ecosystems into organic crop production, NOC requests that the NOSB put the issue on their work plan and collaborate with a team of conservation experts to develop a recommendation to the NOP for a rule change. Until such time that a rule can be put into place, NOC requests that the NOSB recommend that the NOP issues guidance on this issue.

CHAIR RICHARDSON: Thank you very much for your comments. And questions from the Board?

Yes, Colehour.

MR. BONDERA: Hello. Thank you for your testimony. I just want to verify two things
you said. And I think I got them both right in my notes, but you were requesting that the modified PPM go back -- be brought back and get revised in a way that you can see the changes that were made and why they were made. And then it gets put forth because it was put forth for review? Is that accurate?

MS. BADGER: Yes.

MR. BONDERA: And my second question I think should be as simple, which is that according to what was said earlier in this meeting, the contracting entity's name is listed on TRs. Is that correct? I think that's what Jean said yesterday. But you're requesting that as well, the actual author -- the actual person doing the work's name is included in what's presented so that that information is also available?

MS. BADGER: Yes.

MR. BONDERA: Is that -- thank you.

MS. BADGER: Thank you.

CHAIR RICHARDSON: Thank you very much for your comments.
MS. BADGER: Thank you.

CHAIR RICHARDSON: The next speaker is Stephanie Rodriguez Hidalgo, followed by Andy Jones.

MS. RODRIGUEZ HIDALGO: Good morning. My name is Stephanie Rodriquez. I am from Costa Rica. And I work for the National Chamber of Producers and Exporters of Pineapple. Over 80 percent of the volume of Costa Rica's conventional and organic pineapple production and exports are members of our chambers. Members range from small to large growers. Next.

Pineapple production in Costa Rica is divided in three regions, Northern, Atlantic, and Pacific. Next.

I am here today to support the continued use of ethylene. Why should ethylene remain on the national list? Natural methods in forcing the pineapple to flower are known, but where condition and quantity of productions do not permit these methods to be an available solution in our country.
The reason for flowering induction is that production happens at once. Without this condition, growing pineapples would never be a profitable business. And maybe too, a grower cannot estimate dates to sell his production, and maybe too they cannot fulfill the demands.

And maybe too we cannot give a specific date for harvesting otherwise. We wilt harvest the fruit every week, which increases cost. The known inclusion in the national list will strengthen organic production, employment, and family with first of many producers. Next.

At our chambers, we've met with people from the sector, and they came up with the following petition: "The undersigned hereby declare a negative position with respect to the pending motion unto the National Organic Standards Board which would eliminate ethylene from the National List.

We consider this material to be critical for the production of Costa Rican organic pineapples, and the non-inclusion in the National List would severely impact our business operations. Without ethylene, we are unable to harvest the fruit at the optimal time, leading to waste and financial losses. Therefore, we strongly oppose this change to the National List."

Given the importance of this issue, we urge the National Organic Standards Board to reconsider their decision and maintain ethylene as an essential component for pineapple production. This will ensure the ongoing viability of our business and the livelihoods of many in the sector. We are committed to producing organic pineapples, and we believe in the value of sustainability and environmental preservation. Thank you for your attention to this matter.

[Signatures]

[Company Name]

[Contact Information]
List would put our production, employment, and family well-being in danger.

We authorize that our names and petition be relayed to National Organic Standards Board through the public consultation process, and we strongly advocate for a negative vote and that ethylene remain on the National List as a material for use in floral induction for the cultivation of organic pineapples."

The signed petition and the evidence of the meeting was sent attached to the comments many days ago. I am here today to personally hand you the original petition signed by the organic pineapple industry representatives convened by the government of Costa Rica in late September. Next please.

Representatives of the different types of organizations in the sector who sign are cooperative and growers associations, and small, medium and large growers, supporters of organic pineapple, organic certification, intensive producers of organic pineapple, government
representative, and industry organizations.

Thanks for your attention.

CHAIR RICHARDSON: Thank you very much. Are there questions for Stephanie? Questions? Yes, Harold has a question.

MS. ARSENAULT: And Jean, just so you know. Stephanie may have an interpreter for some of the questions.

MEMBER AUSTIN: Stephanie, thank you for coming and presenting to us today. Your information, that is invaluable while we make our decisions.

My question for you is what can we do different to better communicate to the organic stakeholders so that we don't have a near miss such as what we're experiencing with the ethylene where we only have five comments for the first public comment period and we've had 43 plus a lot of oral testimonies today? What can we do different?

MS. RODRIGUEZ HIDALGO: I'm going to answer is Spanish, maybe.

CHAIR RICHARDSON: We should note for
the record that Stephanie would request some assistance with translation. And Chair allows this of course.

  INTERPRETER: That's a very good question, a matter of attending, since we didn't know that the first hearings were held this year. As a Chamber, she thought that those -- this kind of process was going to be held until next year.

  INTERPRETER: She says yes, that we have to find a more direct means of communication, I guess, growers, the government of Costa Rica and the NOSB. So we can make more fluent communication. Since it's -- we have to follow up the official page of the NOSB.

  INTERPRETER: You might think that the certification and all the regulations are for the U.S. organic market. But since we are the growers and exporters, we should be well-communicated about all the decisions because that affects the production.

  This is because 90 percent of all the Costa Rican organic production comes to the U.S.
markets. So we're open to hearing another way of improving the communication.

CHAIR RICHARDSON: Thank you very much Stephanie. Sorry, Calvin, you have a question?

MEMBER WALKER: I do. One option would be, we have a NOSB Organic Insider, would that be a means that they could connect with different activities of NOP and NOSB?

CHAIR RICHARDSON: Let me ask Miles McEvoy to make a comment on the question that was posed also by Calvin?

MR. McEVOY: Yes, we have the USDA Organic Insider that we encourage the folks in Costa Rica to sign up for. It's in English, but if any of you get it --

INTERPRETER: Okay.

MR. McEVOY: It's an email communication that provides updates on what is happening on organic activities in the United States.

INTERPRETER: Yes, we're going to get registered.
MR. McEVOY: Yes, we'll just post it in español también.

(Foreign language spoken).

I'll post it in español.

INTERPRETER: For the first time, well, the first review of the beginning of this year, not even the Costa Rican government and the people that are in service knew about this.

CHAIR RICHARDSON: Thank you. Yes.

MEMBER WALKER: You mentioned that you had a petition that you would like to provide to the Board?

MS. RODRIGUEZ HIDALGO: Yes, I have that, a signed petition here I'm going to give for Michelle.

CHAIR RICHARDSON: Thank you very much Stephanie. And thank you also for the translation.

The next speaker is Andy Jones from Burlington, and he'll be followed by Charlotte Vallaey. Welcome, Andy. Nice to see you.

MR. JONES: Thank you. And I want to
thank Madame Chairwoman and the rest of the Board
for coming to Vermont.

   My name is Andy Jones. I am an organic
vegetable grower from Burlington, Vermont. We do
about 25 acres of certified organic produce and
have been in business since 1990. And I want to
talk basically today about two general topics.

   And the first is relating to the use of
hydroponics or not, in organic production. And I
want to say I support the 2010 recommendation of
the Board to prohibit the use of hydroponics in
organic production.

   I think at its roots, this is a question
of integrity and credibility for the National
Organic Program. Our core business is CSA. And
over the course of the last 25 years, we've had
thousands and thousands of people out to the farm.

   And people always ask, whether it's our
CSA members who are there every week or whether it's
students from the University of Vermont or various
other groups coming through the farm, we're in a
public location and we get a lot of visitors, and
people say well what's the difference between organic farming? And what do you focus on? And why is organic farming important?

And I always start with the soil. And I think to take soil out of organic production in any fashion, is really asking for trouble and undermining the credibility of the overall word, organic. So I would support as I said earlier, the recommendation of the Board and also ask the NOP to establish a moratorium on further certification of hydroponic operations.

I also wanted to speak briefly today to the use or the issue surrounding bio-based, biodegradable mulches, which I know the Board has looked at in some degree.

I think there isn't a perfect solution, but I would ask that the NOP to consider figuring out a way to allow these for use in organic production. As I understand it, the roadblock at this point is that the bio-based component of those mulches is 20 to 25 percent of the various different brands that are on the market.
I think it would be useful to think about having some kind of ratcheting standard where that would be acceptable at this point. And then at five years, instead of relisting, there would be another 35 or 50 percent standard. Because it's not a question of is that a great material, but it's a question of what the alternatives are.

And thousands and thousands of tons of disposable polyethylene mulches that are in use and that are removed from the field and that are then put into a landfill, and yet small fragments of them remain on all the farms. Even those who are conscientious in removing them. So I would hope the Board could consider that at the appropriate time. Thank you.

CHAIR RICHARDSON: Thank you very much, Andy.

Questions for Andy? Yes, Nick.

MEMBER MARAVELL: Do you have any specific rationale or information that would go along with your suggestion that the bio-based component be increased over time? And do you have
any indication the industry could meet that? Do you have any indication of whether or not that could be secured from non-GMO sources, et cetera?

MR. JONES: I don't. I know that part of the activity of the NOP has been to try to set standards that drive the development of certain materials within -- and so I would hope -- I know that the science may be challenging at this point, but I think if there's a maybe if there's a carrot farther down the road, that could act as an incentive for industry.

MEMBER MARAVELL: Thank you.

CHAIR RICHARDSON: Thank you very much, Andy. Very appreciated.

The next speaker is Charlotte Vallaeyes, and she'll be followed by Will Allen.

MS. VALLAEYS: Good morning. My name is Charlotte Vallaeyes, and I'm the Senior Policy Analyst with the Consumer Reports Food Safety and Sustainability Center.

We believe that the organic label offers consumers a meaningful way to choose foods
produced in a safer and more sustainable food system. Consumers have every right to expect that organic foods contain only ingredients that are either organically produced or approved after careful review to the criteria in the law and regulations.

However, there are many examples of organic foods on market shelves today that contain synthetic ingredients that are not on the national list or do not meet the criteria.

The New York Times reported two weeks ago, on organic infant formula and the synthetic additives that were specifically rejected by you, the NOSB, in the spring of 2012. As my colleague, Dr. Rangan mentioned yesterday, NOP needs to take action on this.

But NOSB also has an opportunity to address this problem at this meeting by removing the very problematic nutrients, vitamins, and minerals listing. Only individual nutrients that are required by FDA to be in the food, meaning they are essential to organic handling, should be
allowed.

On ancillary substances, the handling subcommittee has taken a step in the right direction with improved transparency regarding ingredients and processing aids that are used to make organic processed foods.

Unfortunately, the handling subcommittee appears to grant a blanket approval to all substances currently in use. And we continue to urge full review according to criteria of all ingredients that end up in organic foods.

Fish oil fails to meet the criteria for inclusion on the national list because it is not essential to organic handling. There is no need for fish in the production of organic milk, organic yogurt, organic gummy bears, or any other food that contains it.

Since the only reason to add it is for alleged health benefits, it's important to note that two recent meta-analysis studies have concluded there is no association between fish oil supplementation and health benefits.
When celery powder was petitioned in 2007, the petitioner wrote, celery powder cures meat without relying on synthetic nitrates and nitrites. This ancient technology dates back thousands of years. And yet for thousands of years, celery would have been grown using organic methods without synthetic fertilizers.

The conversation we've had with one curing expert suggests that higher nitrate levels in one celery powder versus another, would be due to fertilizers. And we know synthetic fertilizers can drive up nitrate levels in vegetables. So that would be a secondary need for prohibitive substance, and we don't think that's right.

Further concentrations for curing appear to vary tremendously depending on the application. More intelligence is needed so an informed decision can be made.

And finally, phosphates, we appreciate the request for a new TR and urge you to table the vote until the TR is available. Thank you.

CHAIR RICHARDSON: Thank you very

MEMBER SONNABEND: Thank you, Charlotte. What would you think about allowing nutrient vitamins and minerals only for food in the made with organic category? Do you think that that is something consumers would understand, that it would be made with organic. And then would use additional synthetic nutrients?

MS. VALLAEYS: We already have a lot of work on our hands at Consumer Reports explaining the difference between organic, made with organic, 100 organic. And we do believe a consistent standard is what we're after.

And so considering that there are really not that many individual nutrients that should be reviewed and added to the national list in order to meet the consistent standard of if it essentially can be an organic food, we actually think that the way to go forward is to remove the listing for everything including made with organic. And just petition the individual
nutrients that are required by FDA to be included.

CHAIR RICHARDSON: Any other questions?

(No audible response)

CHAIR RICHARDSON: Great, thank you very much, Charlotte.

The next speaker is Will Allen, and he will be followed by Stuart Follen.

MR. ALLEN: Thanks a lot for letting me speak. And thanks for having your meeting in Vermont. My name is Dr. Will Allen; I've been an organic farmer for 47 years, and I've farmed in several counties in California and Oregon.

I served on the Board of CCOF and helped write their first Grower's Handbook. I founded the Sustainable Cotton Project and served as its Executive and Program Director for 13 years. With my wife Kate and several assistants, I wrote "The War on Bugs" book.

Since 2000, I've helped co-manage Cedar Circle Farm, a 45 acre vegetable, fruit, melon, and flower farm in East Thetford, Vermont on the
Connecticut River.

Like my wife, Kate Duesterburg, I am concerned about the cohabitation of organic with chemical GMO farming. And the proposals that organic growers are responsible for dealing with what our neighbors grow and broadcast into the environment.

Unfortunately, neither the Vermont Agency of Agriculture Food and Markets, nor GMO chemical farm neighbors are required to assist organic growers in their effort to determine when GMO corn or other GMO plants pollinate.

Without this data, it's hard to see how an organic farmer could avoid their bees bringing back GMO corn pollen to their hives or to their organic corn fields. While cow corn is our only GMO contaminator in Vermont, GMO sweet corn, squash, and papayas are problems along with cow corn in other states.

This is an example of the victim being required to not only tolerate but ameliorate actions of a trespasser. Also like my
partner/wife, I'm concerned about upgrading organic land management practices.

We are convinced that organic and bio-dynamic farming strategies could have a transformational impact on the excess carbon in the atmosphere and the oceans.

Currently food and agriculture worldwide and forest destruction for oil production are responsible for at least 50 percent of the greenhouse gases that are polluting both the atmosphere and the oceans.

At the same time, our agricultural soils are our largest planetary safe for carbon. But because of bad land management strategies for the last 160 years, those soils have lost 70 percent of their carbon.

While the soil carbon loss is an international tragedy, it also provides an opportunity for reversing climate change and provides a sink currently at about 30 percent capacity, where excess atmospheric and oceanic carbon can be sequestered through photosynthesis.
GMO and chemical agriculture strategies are incapable of significantly increasing soil organic matter because synthetic nitrogen-related bacteria consume most of the soil organic matter, which is 58 percent carbon, and return the carbon to the atmosphere.

Along with toxic pesticides, synthetic nitrogen fertilizers also kill soil microorganisms and earthworms. Conversely, organic and biodynamic systems regenerate soil life with constant photosynthesis which increases soil organic matter and provides sugary saccharides exudates that feed the microorganisms and sequester carbon.

While we eliminated our chemical dependencies in the 1960s, we continue to use the soil disturbance strategies of our families and neighbors. We are currently in the process of altering our management strategies in moving toward less and no-tillage so that we can be more regenerative as farmers and sequester more carbon.

Organic --
CHAIR RICHARDSON: Will, are you about done?

MR. ALLEN: -- and biodynamic farmers have the greatest potential to reverse climate change. We feel that the National Organics Standards Board should advocate for the inclusion of more regenerative carbon sequester strategies as part of its advisories for growers and ranchers. It should also advocate for carbon credits for those organic members who can demonstrate an increase in soil organic matter and soil carbon. Thanks a lot.

CHAIR RICHARDSON: Thank you, Dr. Allen. Questions for Will? Yes, Zea.

MEMBER SONNABEND: Thank you, Will. As you can imagine, all of us sitting up here are very concerned about GMOs, contamination in organic. Considering our limited abilities to get things done, what would you suggest that we do to continue to fight against GMOs?

MR. ALLEN: Well, I think we have to have a full court press. Like what we try to do
in Vermont is pass a labeling law, which we think will have you know, in the long run, it inhibits -- or the effect on the growth of the GMO crops.

You know for many of us, we're surrounded by GMO growers and so -- and even though our bees are not you know suffering from colony collapse, we find that the bees actually are very selective in where they go.

They don't seem to fly north; they seem to stay on our farm and fly south where we farm you know three blocks of land. So we haven't seen any problems with our bees, but I think that you know putting all the pressure on organic farmers to deal with this issue when it's really a trespass issue.

I think, you know -- I would hope that the Organic Standards Board would petition the USDA to try to help farmers that are trapped in those situations like we are. For a long time, we were completely surrounded GMO corn.

And so we couldn't even grow some of our heirloom corns because we knew that they would pollinate and silk at the same time that the GMO
corns did. So we had to -- but that meant that we had to know what the corns were next door, and right now you can't even find that out.

We found out just by finally calling Pollan Seed and finding out what seeds the growers in the state were growing. I mean it's probably a bigger problem in California than it is here. And a bigger problem in those states where there's a lot more GMOs.

But right now, it's almost 100 percent of corn in Vermont that is GMO. In fact, in 2013 it was 103 percent because people replanted. So I mean it's a serious problem that we have to deal with, and it seems like it's all put on our table and nobody else has to deal with this.

CHAIR RICHARDSON: Thank you. Other questions for Will? Thanks very much. Very articulate, much appreciated.

The next speaker is Stuart Follen, and he'll be followed by Robin Hadlock Seeley.

MR. FOLLEN: Good morning, my name is Stuart Follen. And I am Managing Director of
Central American Produce Association or CAPA, which is a pineapple producer located in the northern part of Costa Rica. I believe I am the last pineapple guy you're going to have to talk to this week, so everybody just bear with me.

Having said that, and it's been beat to death here in the last day, I do feel the need to at least mention ethylene usage in regulating the flowering of pineapple. And again, I don't want to beat this into the ground but I flew 3,000 miles to get here for these three minutes.

My colleagues from Costa Rica I think have done an admiral job of explaining the problem over and over again, with eliminating ethylene as a flowering agent.

And so I don't want to really beat that but, and this committee itself in previous testimony has stated that there were no human health or environmental concerns brought to the subcommittee, or to the full Board's attention. And the issues previously raised were found to be minimal or of no concern.
So when you look at the ethylene issue,
I would you know, the result of your vote will
determine whether the organic pineapple industry
lives or dies in Costa Rica, or anywhere in the
world actually.

So I encourage you to demonstrate good
judgment and common sense when you're making your
decision because what you do is going to change
everybody's lives. So we either continue to build
the program or we close it down.

There are a number of questions given
by this panel that were not answered to my
colleagues in Costa Rica yesterday. And I might
be able to answer a few of them.

The question was asked time and again,
why didn't the pineapple industry respond to the
first round of comment? Nobody in our group, and
you have met 98 percent of the people in the organic
pineapple industry in Costa Rica right now that are
here, we didn't know about it.

As much as we're organic, we didn't know
about this. It wasn't until I was contacted a few
weeks ago, maybe a month ago, September I believe, by Lynn Coody because one of our customers buys pineapple from us and she worked with them.

And she got a hold of us and said, do you know anything about this? I said, what are you talking about? And anyway, so that got the ball rolling from here. I live in Portland, from Portland to Costa Rica. We mobilized fairly quickly, and we got on planes and got over here. Thank you.

The second question you said, somebody asked how much is organic pineapple comes, it's 98 percent from Costa Rica. Okay.

CHAIR RICHARDSON: Questions? Yes, Tracy.

VICE CHAIR FAVRE: Thank you for coming. Thank you for being here. Again, I want to reiterate my standing yesterday, that it's important that we do understand, that these are real people with real livelihoods at stake.

And we've asked this in various versions around the table with all the other
growers, what can we do to make sure you guys have
the information you need? Since it has been
pointed out to us, you're the primary supplier and
we're the recipients of something like 90 percent
of the exports from your country?

MR. FOLLEN: Well, it became obvious we
had a problem and I kind of took it upon myself with
talking to Lynn, that I would stay in close contact
and she told me how to stay in touch with this
organization. So in the future, this won't
happen.

You know when you're dealing, the rest
of the groups from Costa Rica primarily, Dole has
an office here and we have an office here, but
nobody else has an office here. So I really, you
know someone's got to take the lead here, and so
in my view I'm going to do it. Just for our company
and you know pass that information down so it
doesn't get lost in translation so to speak.

CHAIR RICHARDSON: Great, there's a
question from Harold.

MEMBER AUSTIN: Well I think Tracy
asked my question, and we got that answered. I would just like to point out though, that I want to thank you for helping us solve a problem that we've dealt with for four years since I've been on here. And that's a matter of how many minutes to allow the speakers. We now know, one minute per every thousand miles traveled.

(Laughter)

MEMBER AUSTIN: Thank you for taking the time to come here.

MR. FOLLEN: Thank you.

CHAIR RICHARDSON: Thank you, Harold. Any other questions? Great, thank you very much, much appreciated comments and for coming here.

The next speaker is Robin Hadlock Seeley, and he'll be followed by Nicholas Gardner.

MS. HADLOCK SEELEY: Good morning. I appreciate the opportunity to provide public comment to the NOSB today. I am Dr. Robin Hadlock Seeley, a marine ecologist at the Shoals Marine Laboratory in Maine. And a senior research associate at Cornell University, where one of my
two research foci is the sustainability of seaweed harvest in Maine.

My comments address the Sunset Review of aquatic plant extracts. The crop subcommittee proposes removal of aquatic plant extracts from the National List based on CFR 205.600(b)(2) criteria which include, "The substance's manufacture, use, and disposal do not have adverse effects on the environment."

These extracts have no place on the National List based on information from the last five to ten years which renders the technical report of 2006 on which prior listing decisions were based obsolete. The technical advisory panel document is even older, 20 years old.

Aquatic plant extracts are derived in large part from the seaweed species, Ascophyllum nodosum, also known as Rockweed, which you see on the slide. The committee materials for today's meeting state that these extracts are mostly derived from kelp. And that is incorrect. I believe they're mostly derived from Ascophyllum
nodosum, which is a Rockweed, and not a true kelp.

In the technical report from 2006, no evidence has been found indicating that this potential over harvest impact is actually occurring. But the following slides that I want to show you indicate that over harvest does occur in Canada and Maine, a major source of Ascophyllum extracts, altering habitat and changing biodiversity.

So this is the underwater Rockweed forest, with the fish swimming through it. The individual plants are like marine trees, and provide habitat for over 150 different species including birds that you see on the screen.

Thirty five fish species, including 25 species that are commercially harvested, including juvenile cod which are of grave concern on the northeast coast now, juvenile pollock, herring, American eel, and many other species.

The Canadian report that was issued in 2013 from the government made clear that the original fish habitat value of the Ascophyllum beds
are reduced or lost together when over harvest occurred.

And I have a clip showing -- not going to show it huh? Well, what the clip would have shown you had it been able to play, is a diver swimming down and a transect of an uncut Rockweed forest, with fish coming through it and the canopy far overhead. And then going to a machine harvested transect, which shows the cut seaweed much shorter, great areas of bare rock. Much less seaweed density and obviously a compromised habitat.

The Canadian government report also listed over harvested areas in Nova Scotia and this was a matter of concern from NOAA from the Department of Interior, including U.S. Fish and Wildlife Service and National Parks Service, many private conservation groups in Maine which wrote letters to the Maine state government.

And finally Dr. Chalker-Scott who was cited in the 2006 Technical Report on "aquatic plant extracts", wrote in the same report that was
cited in that technical report, the marketing of such products, meaning these extracts, is earth friendly, and this context should be repugnant to environmentally conscious consumers. Thank you very much and I'll be happy to take questions.

CHAIR RICHARDSON: Thank you very much, Dr. Seeley. Questions? Yes, Zea.

MEMBER SONNABEND: Thank you for your testimony. We're only as good as the information that is able to come in to us, and we have, we can request a certain number of new technical reports each year, but we reached our maximum for leading up to this meeting.

However, I will as Chair of the Crops Committee, I will be suggesting that we commission a new TR for this one in the future. My question is, are there any, your work is mostly in the Atlantic on the east coast. And I'm wondering if there has been any survey or worldwide aquatic plant environments to see if over harvesting happens in the Pacific, in the Baltic, and the you know many other regions of the world where various
seaweeds are harvested for various uses?

MS. HADLOCK SEELEY: As I said, I believe most of these extracts are this one species, Ascophyllum, which is a north Atlantic species. It's harvested in the northwest Atlantic and in the northeast Atlantic. I'm most aware of what's happening in the northwest Atlantic. It's also harvested in Scandinavia, Ireland, and yes, and Scotland.

MEMBER SONNABEND: Okay, because as you might be aware, we're dealing with sea products for handling as well. There's kelp, is on the National List for handling, as well as extracts such as alginates, carrageenan, and then also we'll be discussing at this meeting laminarin as a pest control material.

So the whole issue of all of the sea derived plants is one that we'd like to address in a comprehensive way, but we have no way of knowing that, as what you say that Ascophyllum being the main species in these products is accurate without surveying the list of all the products available
to see what's in them. So I'm just wondering if there are other resources we could turn to regarding that?

MS. HADLOCK SEELEY: I'm mostly familiar with the Canadian and Maine market. And that I can state with fair confidence is mostly Ascophyllum. You said you had other algal products that you'll be considering. One of my main concerns with the process at NOSB, is you're dealing with common names and these species are tremendously different. They really need to be identified by their species name and not by the general name of kelp.

Kelp is a common name, and can be applied to many species incorrectly, I believe. And when I looked up how FDA handles this, their regulations list by species each species that they are talking about for either approval or disapproval. And I believe that's the standard that you really need to follow.

MEMBER SONNABEND: Thank you.

CHAIR RICHARDSON: Thank you very
much, that was very helpful any other questions?
Great. Thank you.

The next speaker is Nicholas Gardner, to be followed by Kate Davis.

MR. GARDNER: Good morning. My name is Nicholas Gardner and I'm commenting on behalf of the International Food Additives Council or IFAC.

IFAC strongly supports the continued listing of xanthan gum on the National List. Xanthan is an effective stabilizer, thickener, and emulsifier. And is particularly important for suspending ingredients.

Xanthan gum is used in a variety of organic products from baked goods, to dairy products, and dressing sauces, and condiments. It is also widely used in foods for populations with certain allergies and celiac disease.

Xanthan functions well under conditions where other substances would not be viable, such as a pH or at temperature extremes. This critical functionality has been noted in the
comments of other organic stakeholders who indicate xanthan gum in widely used and cannot be replaced.

Xanthan gum in listed in the code of federal regulations as an approved food additive and has consistently been shown to be safe at levels consumed in food. Claimants to the contrary, either result from incidents with subpopulations or from anecdotal reports citing questionable sources.

Because xanthan gum is safe, aligns with organic principles, and is essential to organic production while lacking organic alternatives, IFAC urges that it be relisted.

I'll turn now to phosphates. IFAC also supports the continued listing of calcium phosphate, phosphoric acid, sodium phosphates, and potassium phosphate. However, I would like to focus today on potassium phosphate.

While all these phosphates are essential, environmentally sound, and lack alternatives, and are compatible with organic
principles, due to the recommendations you do list potassium phosphate. I'll focus there.

Potassium phosphates provide many unique functions in dairy foods and beverages due to their ability to stabilize proteins, promote emulsification, and to disperse proteins and favors, particularly in powdered products.

Potassium phosphates are also effective at maintaining pH, which helps to ensure safety in flavors in products such as yogurts. They also help in the production of ultra high temperature dairy products by reducing sedimentation in equipment lines. Lastly, they are commonly used in non-animal protein dairy substitutes. Like yogurts, puddings, cheeses and sauces.

I'd also like to address concerns about potential negative health effects of phosphates. Phosphates have a long history of safe use and their safety has been confirmed from decades of research. Studies alleging that phosphates are associated with adverse health effects has not been validated.
Many of these studies involved humans with preexisting health conditions or animals feed large amounts of phosphates, unrealistic consumption. So as I'm running out of time, let me conclude.

There are no organic alternatives or practices that make the use of potassium phosphate unnecessary. IFAC notes this essentiality is reflected in comments from other organic formulators which state that alternatives have been tested and are not suitable.

I'd like to thank you for your consideration today, and I'm happy to take any questions.

CHAIR RICHARDSON: Question from Tom. Yes, I should, you did finish almost exactly right on time.

MR. GARDNER: And I'd just like the record to show that's the first time I've gotten all my comments in. So thank you.

CHAIR RICHARDSON: Thank you, Tom.

MEMBER CHAPMAN: So I have a question
from your written comments.

    MR. GARDNER:  Sure.

    MEMBER CHAPMAN:  On phosphates, you note that with regards to labeling all phosphate compounds must be included in the ingredients list?

    MR. GARDNER:  That is correct.

    MEMBER CHAPMAN:  Is that true in the case of tricalcium phosphate used as a floating salt?

    MR. GARDNER:  It may be possible that that would be considered a processing aid use. I'm not necessarily an expert on trical. I know there are some folks who will be following me that may be able to answer that question. If it is used as a direct food additive it will always be indicated on the label. Processing aids, have a slightly different labeling regulation.

    MEMBER CHAPMAN:  Are you aware of use of the phosphates as processing aids?

    MR. GARDNER:  I'm not extremely familiar with that.

    MEMBER CHAPMAN:  Thank you.
CHAIR RICHARDSON: Thank you. Other questions? Harold.

MEMBER AUSTIN: In your written comments you guys also supported the listing of sodium and potassium lactate. Could you take and explain that a little bit more please?

MR. GARDNER: Well, we understand form our members that both of those compounds are being widely sold into the organic market. And that there are no current replacements that would provide the same functionality.

MEMBER AUSTIN: Thank you.

CHAIR RICHARDSON: Thank you very much for your comments.

MR. GARDNER: Thank you.

CHAIR RICHARDSON: The next speaker is Kate Davis, and she'll be followed by Wanda Jurlina.

MS. DAVIS: Good morning. I first want to thank you for your work and for thoroughly listening to the wide variety of public comments that you've heard today, and also yesterday.
My name is Kate Davis and I am the Marketing Director for the Americas for CP Kelco. CP Kelco is a company that dates back to 1929 that provides hydrocolloids to the food industry including those for organic production.

Keeping xanthan gum on the National List provides a multitude of options for organic food producers and consumers. It's primarily used as a stabilizer and thickener and is irreplaceable because of these features.

It is pseudoplastic. It is soluble in both hot and cold water. It is stable over a range of pH and of temperature. It is compatible with and stable in systems containing high concentrations of salt. It provides excellent suspension for insoluble solids and for oil droplets. It is resistant to enzymatic degradation. And we provide grades that support natural and organic label claims.

Xanthan gum has been used for more than 40 years in food production without health or safety concerns. And as part of the work that I
do in marketing, it's my responsibility to listen to my consumers. And what the consumers are telling us, they require it in their production.

So we are always checking with our customers, the organic food producers to understand what their manufacturing needs are. They tell us that this is what's important, and this is why they use xanthan gum. Because it aids in viscosity build, provides suspension properties, and still thins for pumpability during model filling in production.

It's useful in systems at temperature extremes. And because of its cold solubility and ability to withstand a range of temperatures in both processing and storage, it's very useful and they can produce in a variety of ways. And it's used across an incredible variety of products and gauge ranges. Everything from salad dressings, to beverage mixes, to baked goods.

They understand it has a record of safe use, and we request that xanthan gum be maintained on the National List. Thank you.
CHAIR RICHARDSON: Thank you very much for your comments. Questions? Yes, Dr. Thicke.

MEMBER THICKE: Can you tell us about the manufacture of xanthan gum, is it made from corn or soy products.

MS. DAVIS: I'm sorry?

MEMBER THICKE: The manufacture of xanthan gum?

MS. DAVIS: I think my next colleague is probably better posed to answer that, as she's our technical expert.

CHAIR RICHARDSON: Thank you. Next speaker is Wanda Jurlina, and she'll be followed by Cheryl Van Dyne.

MS. JURLINA: All right. My name is Wanda Jurlina, I'm the Tech Service Manager for CP Kelco. I've spent my entire career working with things that thicken and gel water, for all kinds of different food applications.

Today I'm going to talk to you a little bit about xanthan gum and what it brings to manufacturers of processed foods, those that are
organic, and those that are not.

One of the things that some of the folks that would like to see xanthan gum delisted have said, is there are alternatives. And I'm here to share with you today, that aren't alternatives to xanthan gum that can provide a manufacturer with the same functionality that they get from xanthan gum.

I've picked three properties that really set xanthan gum apart and put them on this slide for you, along with the ingredients that people say are equivalent to xanthan gum.

Xanthan gum has an acid stability that is unmatched by something like guar. If I'm looking at the viscosity that it creates in a system, locust bean gum can't come close to the viscosity that xanthan gum provides.

And if I look at suspension, whether that be a nutritional component like insoluble calcium, carbonate that can be added to a product, or if I'm looking at suspension of oil droplets in an emulsion, locust bean and guar can't match that
functionality.

When I look at what makes xanthan gum unique is it is cold soluble. So if a processor of salad dressings doesn't use heat in their process, they are going to be able to use xanthan gum. Whereas locust bean gum wouldn't work in that application.

It's pH stable, guar can't match that pH stability in a salad dressing application and give people the functionality that they need. When we're looking at things like temperature stability, that allows our organic producers to ship a product across the states in the middle of summer, or in the middle of winter and have the temperature stability that need.

That suspension that xanthan provides is unmatched in viscous systems. Nothing suspends like xanthan gum in a viscous system.

I also put in this slide that I shared with the group in April to remind everyone of the different applications that xanthan gum goes into. As well as some of the other ingredients that are
already on the organic list, including those that
would like to see xanthan delisted, say, or
equivalent. You'll see from this information that
it isn't. Thank you.

CHAIR RICHARDSON: Thank you very much
for your comments.

MS. JURLINA: Okay, do you want me to
handle the one that you gave Kate?

CHAIR RICHARDSON: Yes, Francis does,
yes.

MS. JURLINA: Okay, so xanthan gum is
a polysaccharide that's produced by
fermentation. What that means is a bacteria in its
normal life cycle produces this long-chain
polysaccharide. In the manufacturing of xanthan
gum, you provide a nitrogen source, you provide a
carbohydrate source. That nitrogen source and
carbohydrate source could be basically any
nitrogen source or carbohydrate source.

So it could be a wheat syrup, it could
be a soy protein, it could be just an ammonia salt
that you're using for your nitrogen source. It
could be a wheat syrup, so there's a variety of
different things that are used in the production
of xanthan gum to provide both that carbohydrate
and that nitrogen source that are required for
life.

MEMBER THICKE: What is the common
carbohydrate source?

MS. JURLINA: Many of the western
producers use corn syrup. We also see wheat syrup
used as well.

CHAIR RICHARDSON: Thank you very
much. Any other comments. Great. Thank you.

MS. JURLINA: Okay.

CHAIR RICHARDSON: The next speaker is
Cheryl Van Dyne and she'll be followed by Lori
Klopf. And I should just a time check. We are
about half an hour behind time.

MS. VAN DYNE: Thank you very much for
your time today. And I hope that we can answer the
questions that you may have on xanthan gum.

Whoops, did I turn it off?

Okay, so, I think I went to the end.
All right, so my comments today are on xanthan gum. CP Kelco is a member of Biopolymer International and IFAC. IFAC is the International Food Additives Council and our focus is on good science and safety of our product. And as Wanda and Kate have mentioned, this product has been in commerce and food for over 40 years. And there's a good body of science and safety information about it.

We urge the National Organic Standards Board to consider continuing to provide the option for keeping xanthan in organic production for the use by producers to provide consumers with the opportunity to have products that would not be available otherwise.

The functionality of xanthan serves an important growing organic market which provide organic consumers with choices. Xanthan is also an essential ingredient and in special dietary consideration is widely used for populations with allergies, celiac disease, and you know for wheat replacements.

And xanthan is the aligned with the
organic principles and it does not have an alternative. Xanthan gum is used in very small amounts and brings value to the producers and consumers.

It's used alone or with other stabilizers by the organic industry in a variety of 95 percent organic products. And it's used by organic producers in food that again provide benefits that would not be available to consumers for their dietary considerations.

Xanthan, to address the manufacturing issue again, is produced in a fermentation process. Fermentation is a nature based process and is used commonly used in food production. Xanthan is produced from natural sources. The bacteria comes from nature. The agricultural input are for the carbohydrates and proteins.

Production of xanthan gum does not harm the environment. And it aligns with organic principles. Because xanthan is produced through a natural process, the bacteria grow the same as gellan. And we mentioned this in the spring. We
are asking you, the USDA, NOP, and the NOSB to consider changing the listing for xanthan gum 205.605(a) non-synthetic.

CHAIR RICHARDSON: Great. Thank you very much for your comments. I think you finished right on time. Is that your ending? Yes, good. Well you definitely get the gold star or whatever it is, a little one.

Questions, Nick.

MEMBER MARAVELL: Yes, just in following up on your statements that xanthan gum is in accordance with organic principles. And you may want to refer back to some of your previous statements and testimony here today.

Is there any possibility that GMO feed stocks, or substrates are used in the production of xanthan gum that you would be providing to organic processes?

MS. VAN DYNE: Well as you know GMO is not allowed in the production. But also as you know, in the U.S. it's very difficult to get GMO-free nutrient medium. Kelco in particular is
working towards that end in getting IP certificates for our nutrient medium.

But also yes, it's difficult so we do have statements from producers. We do PCR testing and so we have a relatively good understanding in our supply chain that we provide a non-GMO xanthan gum.

MEMBER MARAVELL: And do you have a tolerance or a threshold limit on, for your testing?

MS. VAN DYNE: The PCR testing itself, if we do PCR testing then that tolerance is per the PCR limit of the test. I wouldn't know the PCR level, sorry. And I've seen the results and it is negative. Thanks.

MEMBER MARAVELL: So you're going for a negative result.

MS. VAN DYNE: We're going for negative, yes.

CHAIR RICHARDSON: Thank you very much for your comments.

MS. VAN DYNE: Yes.
CHAIR RICHARDSON: Thank you. The next speaker is Lori Klopf, and she'll be followed by Zareb Herman.

MS. KLOPF: Good morning. My name is Lori Klopf and I work for ICL Food Specialties. A company that produces food ingredients for both the conventional and the organic food industry. Our company is also a member of the International Food Additives Council, and we support the comments from this trade association on behalf of continued listing of different phosphates on the National List.

In my presentation I would like to provide some information on why phosphates are important in providing a variety of different foods based on organic products.

Phosphates are a combination of phosphors from natural ore with basic salts to produce food grade pure phosphates. Phosphorus is an essential element in the human body and it is key to many biochemical processes. This element is present naturally in many foods and the addition
of phosphates to foods does not contribute significantly to the overall intake of phosphorus in foods.

Phosphates have been scientifically reviewed for safety in foods by international regulatory bodies and the overall scientific evidence shows that they are safe for use in foods.

I'll now highlight some of the main functions of phosphates in foods. Leavening, or raising action is needed for baked goods. Phosphates are common components in baking powder which combines ingredients that react to form gas that creates the needed texture and fluffiness in foods such as cakes, muffins, waffles, batters, and tortillas.

Also phosphates are needed in cheese sauces. Cheeses naturally contain protein, fat, and water. The addition of a small amount of sodium phosphate helps stabilize the system and provides consistency and smoothness in the cheese sauce.

This slide shows a few examples of
organic products which do contain phosphates. The cheese sauces, and also dry powdered cheese sauces require phosphates for smooth texture. In addition some baked goods are shown here that use phosphates as part of the baking powder system to create products with the correct texture, tortillas, the batter on the mozzarella cheese sticks, and frozen waffles.

Two other essential functionalities of phosphates are shown on this slide. Phosphates are some of the most affective buffers available. They are able to adjust and maintain a desired pH of a food system. They are often used in coffee creamers, or whiteners to prevent the fat separation and to give a smooth whitened product when added to this hot acidic coffee beverages.

A popular property in stores are the variety of non-animal protein beverages often marketed as milks. From sources such as almond, rice, soy, coconut and more. Calcium phosphates provide both the nutrient calcium as well as providing a rich whitened appearance to the
beverages. Some examples of these products are shown in this slide.

In conclusion, I'd like to reiterate some of the following points, phosphates offer many benefits for texture and taste of organic foods. They have unique functions in organic foods that cannot be duplicated by other organic alternatives. And we support continued listing of phosphates on the National List to use where needed in organic foods. Thank you.

CHAIR RICHARDSON: Thank you. Question, Tom.

MEMBER CHAPMAN: I have two questions. If phosphates are being used as part of the baking powder would they be labeled as phosphates or be labeled as baking powder?

MS. KLOPF: They would both, typically it will say baking powder, and then in parentheses, it lists each ingredient in the baking powder. So it would be listed on the ingredient list.

MEMBER CHAPMAN: Then in the course of researching this material, there's been issues
raised with calcium absorption being prevented or compromised. But sequestered, calcium being sequestered due to the presence of phosphates. Do you have any information in providing further details about calcium related issues, absorption, phosphates?

MS. KLOPF: I'm sorry, I didn't quite understand your question.

MEMBER CHAPMAN: Nor did I understand what I was asking, so. I'm going to yield to Jean who'll try to ask my question better.

CHAIR RICHARDSON: I think what Tom is trying to say, is that some of the research indicated that the calcium is actually bound up, is the known accessible when it's in a phosphate form. Do you have any of the science that might help us to understand that any better?

MS. KLOPF: Right. We have had bioavailability studies done on these products. And no, the calcium is not bound unavailably from calcium phosphate.

CHAIR RICHARDSON: Any other
questions? Great. Oh, sorry. Lisa and then Zea.

MEMBER DE LIMA: I noticed in some products, dairy products like cottage cheese for example, where some brands will use calcium phosphate and others don't. So could you, do you have any information on necessity and why one brand might use it, and another might not?

MS. KLOPF: Well, typically as you know, they would have to meet the standard of identity to be called cottage cheese. But why it would be used or not would depend on the overall formulation in there. And I can't recall exactly right now the standard of identity, what that calls for as far as phosphate levels. But there would be an allowance for one type or another.

MEMBER DE LIMA: Can you explain this standard of identity, it's one I don't know.

MS. KLOPF: Oh, yes. For certain food products in the code of federal regulations there, it's called center of identity. So in order to be called cottage cheese or peanut butter or whatever
you have to meet all the requirements.

And it does give ingredients that are allowed, and certain levels. So it would need to meet those you know not, you can't put anything else in there other than what is allowed in that standard of identity.

CHAIR RICHARDSON: Zea.

MEMBER SONNABEND: Thank you. You made a statement to the effect that because foods already have phosphorus in them, adding phosphates didn't add to the overall consumption of phosphates that a person would ingest. And I wonder what that statement is based on?

MS. KLOPF: Okay, well there's another word in there, it doesn't add significantly to the overall intake of phosphorus. Phosphate or phosphorus is present in all plant matter, and there is in meats, and there are a number of natural sources of phosphorus. So when phosphates are added in foods, it's really at a very low level, so it does not significantly impact the intake of phosphorus.
MEMBER SONNABEND: Like percentage wise, compared to an overall phosphorus in a food, is an added phosphate 1 percent, 10 percent, .1 percent?

MS. KLOPF: Well, of course it depends very much on the food. If it's used as a buffer, phosphates are very effective at low levels, so it is you know less than half a percent in the food. And maybe up to a couple of a percent depending if you're trying to use like calcium phosphates as more of a nutrient or whitening source.

CHAIR RICHARDSON: Calvin, question?

MEMBER WALKER: For my benefit, could you explain again the standard, or of an entity. My note says that the ingredients must meet a certain level to be, that was your definition?

MS. KLOPF: In the standard of identity, basically you must meet all the requirements in the standard of identity. So you can only include ingredients that are allowed. And there may or may not be levels that are included in the standard of identity, just depending on,
each one is different. But is there are levels you
must meet those as well.

Thank you very much for your comments,
much appreciated. We will take Zareb Herman's
comments and then we will take a ten minute break.
Zareb.

MR. HERMAN: Good morning. My name is
Zareb Herman. I am a nutritionist and a food
scientist with The Hain Celestial Group. One of
the largest producers of organic products in the
world. I want to continue the discussion of
phosphates.

And Harold said, that we get a thousand,
we get one minute for every thousand miles travel,
so I traveled 2500 miles, so my comments will be
exactly two minutes and 30 seconds.

Calcium phosphates are very important
in organic production. The monobasic form is used
as a leavening agent by many companies to produce
hundreds of organic baked products. There is no
other substance on the National List that is
equivalent.
The dibasic and tribasic forms are also used in many organic products. Sodium phosphates are commonly used in dairy products including some organic cheeses. Our suppliers of organic cheese powders tell us that sodium diphosphate is essential in stabilizing the proteins and preventing oil separation. There is not a suitable alternative on the National List. We request that sodium phosphates and calcium phosphates remain on the National List.

I want to focus on potential health concerns. Phosphates are a dietary source of phosphorus which is an essential mineral for human health. The recommended daily intake of phosphorus for adults is 1000 milligrams per day. Many Americans consume more than this amount because phosphorus is found in a wide variety of foods.

For example a four ounce serving of fish contains about three hundred and fifty milligrams of phosphorus. There is concern that some individuals especially those with kidney disease
may experience adverse health effects from excessive phosphorus intake.

More research is needed to clarify the safe upper limits for consumption but the phosphates that are allowed in organic food products contribute a small fraction of the phosphorus in the diet. This should not affect human health.

And finally if an individual wishes to limit his intake of phosphorus, he or she can check the product ingredient statement. Thank you.

CHAIR RICHARDSON: Thank you very much for your comments. Questions? Harold.

MEMBER AUSTIN: Thank you, Zeb. My question to you is with the calcium phosphates have you looked at any potential alternatives? Are there any that could possibly work?

MR. HERMAN: Well, when you talk about alternative, you're talking about things on the National List. And we have a limited National List.

And when it comes to the monocalcium
phosphate which we use as a baking powder, there isn't any other leavening agent on the National List that is equivalent that has the same reaction rate when you're baking your product at a certain temperature, and for a certain time.

CHAIR RICHARDSON: Tom, you have a question?

MEMBER CHAPMAN: In follow-up to that, are there equivalent products that are not on the National List for the application?

MR. HERMAN: Well, for an organic product, it has to be organic. I'm not aware of any organic alternative.

MEMBER CHAPMAN: How about those for a conventional product?

MR. HERMAN: For conventional products?

MEMBER CHAPMAN: Yes.

MR. HERMAN: Well, not to my knowledge.

CHAIR RICHARDSON: Thank you, are there other questions?

Very good, thank you very much for your
I'd like to take only a ten minute break because we are running more than about a half an hour and late. So if we could come back say at 25 past ten? That would be really great and we can maybe get caught up a little bit before lunch time. Thank you.

(Whereupon, the above-entitled matter went off the record at 10:12 a.m. and resumed at 10:26 a.m.)

CHAIR RICHARDSON: All right. Our first speaker in this section of our public comment will be Kris Anderson. And he'll be followed by Myra Weiner.

MR. ANDERSON: Well thank you very much for letting me speak to the Board today. I'm an organic hop farmer from here in Vermont and I'm going to be discussing the issue of weed control in hops.

Yes, the main issues in any organic growing system is adequate fertilization, weed control and pests. And what I'm talking about
primarily are the second two today.

Conventional hop growers in the U.S., especially, basically just use chemical desiccants to kill all the plant around the bottom of their plants, in their rows and the lower leaves so there's nothing to grow fungus and to support insect's populations. At least pest and insect populations.

There are organic desiccants but they're all really expensive and they're not that affective. I've used them myself and they didn't work all that well.

There is one other major control method that's used in all of the major hop growing areas of the world and that's sheep. This is the traditional way that hop farmers have controlled their weeds.

They basically leave all the grasses and weeds around the base of the plant. So once the plants are about four feet high, they won't eat the stalk of the vine and they'll eat the lower leaves. And therefore it will help improve
airflow and decrease fungus and insects.

Right now in New Zealand, Australia, where they really don't use any pesticides because a lot of the fungi, which are issues for hops, are not present. They use sheep as the only weed control method.

Right now in Canada and Europe, especially in organic hop farms, this is the legal way that people by and large control weeds and fungi.

Right now in Canada, and so the pictures I'm showing here are from a farm just across the border in Ontario, they're exclusion period for sheep is about two weeks prior to harvest. They make certain that the vines, when they're cut down, do not lay on the ground where the sheep feces would be. And that's approved by the, at least Canadian Organic Standards Board.

In New Zealand and Australia right now, the exclusion period is about four weeks prior to harvest.

In the U.S. unfortunately, for
vegetable crops, the exclusion period is 120 days. There's an orchard exception for 90 days.

The problem is that 90 days prior to harvest, my plants aren't four feet high. The sheep will eat the plants. And therefore there's really no benefit for having sheep in that early.

They tried to find a way around it in Michigan earlier on this year, but their organic certifier couldn't find a way around that part of the rule. Same with our certifier here in Vermont.

So my request to the NOSB is hopefully you support an exception to that 120 day sheep exclusion rule for hop yards, to about 30 days, just like they do in New Zealand. Or just shorter than what they, which is longer than what they do in Canada right now.

The rational for this is, is this a traditional method with centuries of use for how people control weeds and fungi in hop yards. It's an easy method, they're easy methods to prevent the vines from falling on the ground or getting contaminated.
The hops are not directly consumed as a food anyway. They're always either having alcohol in there or they're going to have been boiled. Which is going to kill whatever pathogens are present.

Thank you for listening. And have if you have any questions --

CHAIR RICHARDSON: All right. We have a question. Tracy?

VICE CHAIR FAUVRE: As a sheep farmer, I've just got a text from my sheep and they wanted to know when they could get a grazing gig doing hops.

My suggestion is that perhaps you could consider a petition for this. Bring it before the Board and you might get some action on it.

MR. ANDERSON: Okay.

CHAIR RICHARDSON: Tom?

MEMBER CHAPMAN: I have a question, probably for the program. Would this be a material petition or this would need to be a change to the regulations?
MR. McEVOY: Yes, it's an interesting situation. Because the use of manure is excluded in 90 and 120 days. And the question is, is sheep grazing in application of manure. So it's not like you're taking the tractor down the rows.

I think this is something that we can look into at the program level. Look at potentially some guidance on this.

We certainly would have to consult with the FDA in terms of the implementation of FSMA. But this is something that I think we, as the program, could take a look at.

I'm not sure if it needs NOSB action, but certain we can take a look at this and confer back to the Board on this dilemma about sheep grazing in hop work.

CHAIR RICHARDSON: Yes, Nick? Quick question.

MEMBER MARAVELL: More of a comment. This is not the first time that we've heard about this issue.

And I think it would behoove you to talk
to people who have other permanent vines or orchards to see what they're applications are for sheep grazing. Because I think that it could be a very viable weed control strategy.

And the more people you have asking for that strategy, well, sometimes it makes it worse, sometimes it makes it better. I can't tell you which.

CHAIR RICHARDSON: Thank you very much, Kris, for your comments. My appreciated.

MR. ANDERSON: Thank you very much everybody.

CHAIR RICHARDSON: Thank you. Next speaker is Myra Weiner. And she'll be followed by Rolf Carlson.

MS. WEINER: Thank you for this opportunity to speak to you this morning. I'm Dr. Myra Weiner. I'm a consulting toxicologist presenting comments on behalf of Innophos.

Just some background. The inorganic phosphate food additives are composed of the phosphate molecule with four oxygen's. The
valence of minus three cations capable of binding in the food area are hydrogen, sodium, potassium, calcium and magnesium.

As has been stated, phosphate is an essential nutrient to life. It is required for normal physiological functions.

Dietary phosphates are rapidly absorbed and excreted in urine with no bioaccumulation. Dietary phosphate is treated and handled by the body in the same way as naturally occurring phosphates.

Food additive phosphates have a long safe history of use in foods spanning five decades. The safety is based on a large database of animal studies by oral administration. Primarily dietary.

Long-term dietary studies have shown the inorganic phosphates to be safe. They cause no adverse effects, when feed at levels up to 0.5 percent in the diets in rats and dogs, over a lifetime.

Inorganic phosphates have been shown
not to be carcinogenic, genotoxic or mutagenic in animal and in vitro studies. They do not cause birth defects, reproductive toxicity in laboratory animals at high levels through oral gavage or diet.

They show the same safety profile regardless of the cation. Whether it's sodium, potassium, calcium.

Because the phosphates are all similar, they're regulated as a group. The U.S. FDA has approved the use of phosphates by direct addition to food.

And the select committee of the FDA considers them generally recognized as safe. Or grass. An indication of their high level of safety. They do not present a hazard to human health when added directly to food.

Globally, the World Health Organization Joint Expert Committee on Food Additives, or JECFA, concluded that a maximum tolerated daily intake, or MTDI, of 17 milligrams per day, per kilogram body weight, is permitted.

CHAIR RICHARDSON: Thank you.
MS. WEINER: This slide shows --

CHAIR RICHARDSON: Yes, you have much --

MS. WEINER: I'll just show you one slide, because it answers a question that was raised earlier on the level of phosphate added to the human diet from the food additives. It's roughly ten to 30 percent of the total phosphate intake.

On the left is the daily intake estimated by FDA for food additive phosphates. Roughly 300 milligrams per day.

The recommended daily intake, essential for life, is from 800 to 1,200 milligrams per day. And the JECFA maximum acceptable daily intake is up to 4,900 milligrams per day. Thank you.

CHAIR RICHARDSON: Great, thank you very much. Questions? Zea?

MEMBER SONNABEND: Thank you. On that bar chart, I noticed that the average daily intake per capita is data from 1975. Since 1975, far more
processed food is consumed and far more processing ingredients are added to that processed food.

And so could you give a perspective on more current data of how much is consumed per capita in processed food, given increased consumption of processed food?

MS. WEINER: Well that data is being reevaluated currently and I don't have a number. But in general, the total phosphorus intake, from both food additives and naturally occurring sources, is roughly the same. And is well below the maximum tolerated daily intake.

CHAIR RICHARDSON: Tom, you had a question?

MEMBER CHAPMAN: So I wanted to hit on the question I asked earlier about the relationship between sodium phosphate and calcium sequestration. Do you have any further data about when calcium combines with the phosphate that it reduces the combinability to absorb calcium?

MS. WEINER: I can't hear you.

MEMBER CHAPMAN: I wanted to ask about
the relationship between sodium phosphate and calcium sequestration. And the claim that we've read in our technical reviews.

I think that when calcium combines with phosphate, the body's ability to absorb calcium is reduced.

MS. WEINER: Well I haven't seen that claim, but based on my information, and the calcium phosphate is actually providing two essential ingredients or nutrients. Both calcium and phosphate. So that's very important for the body's balance of good nutrient and good bone health.

MEMBER CHAPMAN: That's the case with calcium phosphate. My question was about sodium phosphate.

MS. WEINER: Sodium phosphate, again, all of the regulatory agencies look at the group of phosphates in the same way. By the phosphate. Now they don't distinguish by the cation. So they're all considered fine. And in fact, a lot of the animal studies were done using
sodium salts with no problem.

CHAIR RICHARDSON: Thank you very much for your comments. Much appreciated. Our next up speaker is Rolf Carlson. And he'll be followed by Reed Miller.

MR. CARLSON: Thank you for this opportunity to comment. My name is Rolf Carlson. I am the vice-president for sourcing and sustainability at Stonyfield.

We have submitted detailed written comments and I will focus today on natural flavors, colors and the proposal on ancillary substances and microorganisms.

Stonyfield supports the application of commercial availability to the flavors listing as a way to encourage industry to move away from use of natural flavors and use organic options whenever possible, without being disruptive in prematurely removing natural flavors from the list.

The OTA points out that better guidance from NOP on how commercial availability should be evaluated, would help to ensure a consistent and
more effective approach to compliance across the industry. We agree.

This guidance could hope to ensure that there is a stronger signal for demand for high quality organic flavors coming from processes across the organic sector. Hopefully this would lead in time to better availability of high quality organic flavors.

We are also glad that the availability of organic colors has improved to the point where NOSB can consider sun setting some of them. However, the NOSB should consider all aspects of commercial availability before making this decision.

We are aware of a few instances where organic colors are not available and comparable quality to natural options. In particular, we had trouble with quality of organic black or purple carrot juice extract, carrot juice extract and turmeric extract. We urge the NOSB to leave these three colors on the list for now.

Stonyfield is supportive of NOSBs
efforts to conduct a more thorough review of ancillary substances. Because we believe this will improve the transparency of the list itself and provide further assurances to consumers that they can trust organic label.

The current proposal is a step in the right direction, but there are some improvements still needed. First, the term ancillary substance is not commonly used or understood by the food industry.

The NOSB should develop a recommendation to NOP for definition of ancillary substances. This would make it much easier for companies like us to communicate with our ingredient suppliers about this topic.

Further, NOP should develop a formal affidavit that can be used across the supply chain to consistently communicate and collect the rest of the information that is needed to assess compliance.

We support the recommendation that the ancillary substances that fall into one of the
functional classes are readily reviewed by the NOSB, do not need further review in order to be used.

To avoid unnecessary roadblocks in the R&D process, it is important that any guidance allows for use of particular ancillary substances that may have been overlooked in the initial R&D process. Provided they are consistent with known functional categories.

We believe that the best way to manage information about ancillary substances is for NOP to publish proposed guidance based on recommendations they receive from NOSB and allow for public review and comment period. Thank you for the opportunity to comment.

CHAIR RICHARDSON: Thank you very much. Questions? Tom?

MEMBER CHAPMAN: So I know you commented on those three colors --

MR. CARLSON: Correct.

MEMBER CHAPMAN: -- that you do not find as commercially available. Are there other
colors, organic colors, you're utilizing currently? That in your --

    MR. CARLSON: Organic colors?

    MEMBER CHAPMAN: Yes.

    MR. CARLSON: Yes. We have, well you know, with organic colors and flavors we had made lots of progress with vanilla and beet juice. Okay.

    And during our renovation process or products or development of new products and favors and colors, we currently assess, if available, at least three sources of organic first, before turning to the natural options.

    MEMBER CHAPMAN: So you're using organic beet juice currently?

    MR. CARLSON: Correct.

    MEMBER CHAPMAN: Okay. Thank you.

    MR. CARLSON: Thank you.

    CHAIR RICHARDSON: Any other comments?

    Great, thanks very much for your comments. Much appreciated.

    MR. CARLSON: Thank you.
CHAIR RICHARDSON: Next we have Reed Miller. And you'll be followed by Katrina Heinze.

MR. MILLER: Good morning. My name is Reed Miller. I'm the owner and operator of Dwight Miller & Son Orchards in Dummerston, Vermont.

I'm celebrating my 20th year of certified organic fruit production, but we have been growing fruit as a family since pre-Civil War. We're well experienced in what we do as far as fruit production.

I'm here to comment on sulfur, not sulfur, calcium polysulphate. Which is liquid lime sulfur. And copper.

And these apples that are here by the pots, those are fruit that were grown this year. The results that you're going to see up here on the screen are actually to show you that we can grow high quality. The highest quality of fruit in the northeast under damp conditions without the use of synthetic chemicals.

I have been using calcium polysulphate since, well for the last 19 years. At one point...
I was told I was the largest user in the country. I've used about 30,000 gallons on about 4,000 different rates. On a myriad of different crops.

What we've done is we've broken down that product into something where we understand very clearly that it's not the material, it's the rate. And it's a very safe, very effective material to use when it's used at the proper rate.

When problems can occur, it might be the excessive rates that were basically attributed to my forefathers generations.

When these compounds were used back in my fathers, forefathers generation, Pre-World War II, they were done using very big equipment. Lots of water.

And nothing that can be compared to today using the rates that we have electronic equipment at very small rates. So we've been able to break this down and to use it very safely, very effectively under some conditions that would be absolutely not considered good under most growing conditions. Are there any questions?
CHAIR RICHARDSON: Questions?

Harold?

MEMBER AUSTIN: Thank you, Reed. With your use of the lime sulfur, have you seen any negative impact on beneficial insects in our orchards?

MR. MILLER: No. In fact I have a friend who I have advised to use this and has done it very successful as a conventional grower in the Northeast and his beneficials have actually expanded.

Again, I'm going to say that it's, you can hold enough salt in your hand to kill you, but sodium is essential to the human body. It's not the poison, it's the rate.

And the rates that we use are significantly less than what was previously done by my forefathers. And so the compound itself I think is something that has to be kept, something that needs to be utilized.

There's a reason why it's expanding. Because all it is is basically pH. We're talking
about sulfur and calcium. We all need it.

CHAIR RICHARDSON: Other questions for Reed? Thank you, Reed. Excellent, very clear presentation. Very much appreciated.

Our next speaker is Katrina Heinze. And she'll be followed by Joe Moidl.

MS. HEINZE: Wow. They kick you off the NOSB for real.

Good morning. Thank you for your time today. My name is Katrina Heinze, and I'm the organic ambassador for General Mills and a former NOSB member who served from 2007 to 2012.

I'd like to thank the NOP staff for the public comment webinars, which gave access to more folks. Both so they could comment, but more importantly so they could hear what happens at NOSB.

We took advantage of it and I know lots of other folks did as well. Great practice, keep going.

Nick, Colehour, Jennifer, Calvin and Mac, it was a privilege to serve with you and I look
forward to welcoming you to this side of the podium.

General Mills is one of the leading producers of organic products in the United States. Each year we serve products certified to the USDA National Organic standards to over 10 million U.S. households. And we're growing our organic commitment.

This past August, as part of our commitment to reducing our greenhouse gas emissions, 28 percent in the next ten years, we committed to increasing the organic acres from which we source by 250,000 acres.

Since retiring from the NOSB, I've sat in your audience listening to robust debate between those worried that imperfect organic standards are hurting consumer confidence, and those worried that a drive for perfection will impeded growth and limit the impact organic can have. Both are right.

And you, the NOSB, exist to find balance between those perspectives. If it was easy or it was obvious, you wouldn't be necessary.

The compromises between varying
visions of what organic can be, decided here by you and previous boards, have nurtured the growth of 100 million acres globally and 5 million acres in North America.

As you make decisions, please think about how to increase acres and the associated environmental impact, while maintaining consumer confidence. How can a continuous improvement approach allow us to collectively move toward the vision of agriculture we share?

Think about the success we had with hops and annatto listed and now removed from 606. How can vigorous understanding of your divergent perspectives accelerate the adoption of organic farming practices? Is there a long-term goal that can be enabled by short-term flexibility?

Thank you for your service, your great debates and communicating your vision so we can head there together.

CHAIR RICHARDSON: Thank you, Katrina. Questions from the Board Members? Nope, you're off the hook.
MS. HEINZE: Thanks.

CHAIR RICHARDSON: Thanks very much, Katrina. The next speaker is Joe Moidl. And he'll be followed by Troy Aykan.

MR. MOIDL: NOSB Members, thank you for the opportunity to comment today. My name is Joe Moidl and I lead the National Organic Community within the Research and Development and Quality Organization at General Mills.

As more households choose to buy organic, we see that they are searching for foods that align with their values, provide healthy nourishment and taste great.

Increased consumer demand for organic products has brought a significant increase in the number of organic choices. Which is great for consumers. And in turn, a collective desire, our collective desire, to increase organic acreage.

While we respond to the increasing demand for organic products, we need to recognize that consumers have a choice when it comes to the products they purchase and will not compromise in
the need for great tasting quality products. And one of those choices is non-organic.

Prudent and responsible use of the materials on the national list can help us to deliver and develop diverse portfolios of great tasting organic products to meet our consumer's needs.

That said, when developing organic products at General Mills, it is our philosophy and approach to use organic when possible and avoid using natural flavors currently approved for use as listed on 205.605(a).

In a small number of cases, organic flavor systems don't meet consumer expectations. Either at initial development or over the shelf life of the product. And we will use products from the approved list, 205.605 (a).

For this reason, we want to see more organic flavor options coming to the market. And believe that the proposal will do just that.

Adding commercial availability to the natural flavor listing on 205.605(a) is
responsible stewardship and supports the advancement of the organic flavor industry.

In summary, this proposal is consistent with our principles and practices at General Mills and we are supportive of the initiative. Thank you for your listening and your service to furthering the mission of increasing availability of organic goods for our consumers.

CHAIR RICHARDSON: Thank you very much. Questions? From the Board? No questions. You are a lucky guy.

All right, the next presenter is Troy Aykan. Followed by Joe Smillie.

MR. AYKAN: Good morning. My name is Troy Aykan. I am a food scientist and an attorney with Hain Celestial Group. One of the largest organic producers in the world. I also teach courses in food laws and regulations at several universities.

We strongly support the continued listing of de-oiled lecithin on the national list. Lecithin is one of the most widely used emulsifiers
in organic foods. And some of these food applications are oil in water emulsions that utilize the oil lecithin.

There's currently only one manufacturer of organic de-oiled soy lecithin. If there's a shortage of organic soy beans or if the one manufacturer shuts down for any reason, organic de-oiled soy lecithin is likely to become unavailable.

In addition, our company and other companies produce organic products that are soy free. Some of these products utilize the oil lecithin from sunflower seeds or other sources.

These do not exist in organic form. Therefore it is very important to keep the oil, lecithin, on the national list.

I also want to make some brief comments on xanthan gum. Xanthan gum is a safe effective thickener that is used in many organic products.

In certain applications, it is superior to other gums in providing the right viscosity and texture when hydrated. We use it in organic cake
and cookie mixes, beverages, soups, entrees and personal care products.

We want to stress that xanthan gum is very safe to consume, despite some comments to the contrary. We request that xanthan gum remain on the national list. Thank you.

CHAIR RICHARDSON: Thank you very much for your comments. Francis?

MEMBER THICKE: Thank you. Does Hain Celestial Group use any de-oiled organic, de-oiled lecithin in your products now currently?

MR. AYKAN: Yes, we do.

MEMBER THICKE: Do you --

MR. AYKAN: Oh, that was too close. I'm sorry.

MEMBER THICKE: Do you, at this point, do you use all organic lecithin for your organic products? Or do you use something conventional?

MR. AYKAN: We use -- I don't, obviously I don't have access to our entire portfolio, but whenever it's -- the organic form is available we use it.
It's not like we're not using non --
it's not like we're not using organic de-oiled soy
lecithin when it's applicable in form and quantity
and quality, we use it. Yes.

MEMBER THICKE: Have there been times
when organic has not been available in recent
years? Have there been times in recent years when
organic de-oiled lecithin has not been available
for you, for soy product?

MR. AYKAN: As far as the supply of it,
that I cannot really talk to the supply of it. But
there is some applications.

The quality may not be available. As
you guys may be aware of certain characteristics
of soy lecithin.

Let me check my research here. Just a
second please. There is like what's called
hydrophilic versus lipophilic balance. Which is
HLB.

Referred to it as it's seven for the
de-oiled, conventional de-oiled lecithin, as
opposed to four with the organic de-oiled soy
lecithin. So they don't exactly work same way. But in applications where we could use the organic de-oiled soy lecithin, we do use it.

And as far as the availability, we should also be concerned about the fact that there are soy free products. Our non-dairy frozen desserts.

There is no dairy, no soy. We use lecithin. And we need to de-oil lecithin from sunflower and other sources, which are not currently available in organic form.

So if you were to delete de-oiled soy lecithin, we would basically kill all these customers demand in something soy-free non-dairy frozen desserts and similar products.

CHAIR RICHARDSON: There's a question from Nick Maravell.

MEMBER MARAVELL: Yes, I agree having one source of lecithin organic from soy is not a good thing. Do you have any suggestions on how we could increase the incentives for additional producers of lecithin that would be organic in
nature? Yes.

MR. AYKAN: Yes. When you say incentive, would you mean incentive as to the potential manufacturers of de-oiled lecithin or to the handlers? Or both?

MEMBER MARAVELL: Oh, I think the handlers would use organic if it was available.

MR. AYKAN: Correct. Yes.

MEMBER MARAVELL: No, I'm looking for, how do we get, and I'm sure the producers would produce more oil crops, the organic producers, if that were necessary.

MR. AYKAN: Yes.

MEMBER MARAVELL: I'm asking how to make the incentive to get more people into the manufacturer of the product.

MR. AYKAN: Yes. I believe in the free market economy and the enterprises that if we make it clear, that the moment we could supply with our organic food industry with the same quality, quantity and form of this material. Not only in soy, but also from sunflower seeds and other
sources.

If NOP to make -- would be to make a press release or something, then it could be representation then taken out. And some entrepreneurs may see some advantage in that. Getting into that kind of business.

It's what I think of as far as incentives.

MEMBER MARAVELL: Do you see anything that NOSB could do to help those incentives?

MR. AYKAN: Yes, they could. Absolutely. Yes, if you were to make a statement as you vote and make a commitment that, you know, the moment we have available, de-oiled lecithin in that similar quality, quantity and form.

And then this lecithin maybe sunset or something or be petitioned to be sunset. You could have that as some kind of statement.

I know that we may not get to change annotations, if I understand the procedure correctly with our votes, but I'm sure that there could be some kind of statement or press release.
I would obviously consult with the NOP for guidance on that.

CHAIR RICHARDSON: Thank you very much for your comments.

MR. AYKAN: My pleasure.

CHAIR RICHARDSON: The next speaker is Joe Smillie. And he'll be followed by Larry Plesent.

MR. SMILLIE: Hey all. Congratulations on continuing a wonderful, open, transparent and democratic process. It's quite amazing to see it continue.

I do live in Vermont. And I have the Vermont organic license plate.

I've been involved in the organic movement a long, long time. I've been a homesteader, a gardener, a farmer, an insect consult, a fertilizer salesman, a commercial composter and an orchard consultant, an inspector and a certification agent. So I've sort of seen a lot of different sides of this wonderful trade we're all in.
I'm a founding member of OTA, the IOIA and a previous NOSB member. One of the wonderful things that I learned, while serving on the NOSB, was the law of unintended consequences. This will come up a little later.

I concur with the Vermont Secretary of Agriculture Chuck Ross, Grace Gershuny, Bill Wolf and others who have pointed out the dangers of polarization within our movement. We've talked about it many times, it's not an old story.

As Katrina said, we have to balance, you know, the perfect with the good. You've heard it all before, you all have your views on it, I'm not here to change your point of view.

My view is we need to change agriculture from one percent to a heck of a lot more. And the way we're going to do that is by making the tools available to farmers and processors that they need to convert those three years when they have to grow organic and sell conventionally. That's a tough thing for any economist to swallow.

The law of unintended consequences
really started when OFPANA debated how we would draw the line between what's organic and what's not. We decided, perhaps not to our wisdom, that we would draw that line between natural and synthetic.

That was a decision that was made, it was argued and that was the final decision in the early days. This has led to an unintended consequence that has led to what I call the demonization of synthetic substances.

I've listened to Reed Miller, Nathan Allen, Vern Grubinger and may others talk about the need for these tools, which may or may not be deemed synthetic. They're necessary.

When I was an orchard consultant, and Miles will appreciate this, when we got the coddling moth mating disruptive, it enabled consumers to eat really good apples without worms. Or without a half of worm, even worse.

Coddling moth mating disruptive is a synthetic pesticide. That's what it is. And it's a wonderful nontoxic species specific tool that we
need.

There are many other tools. You saw Reed's history of the use of polysulfur. There's many, many more.

We need to keep these tools and sort of stop the demonization of all things synthetic. What's natural isn't always good. What's deemed to be synthetic is not always bad.

That's about really all I have to say about that. Let's keep the tools and the farmers in processors' hands so that we can grow organic and not leave it as imperfect.

Last two things. I was glad to see that the recommendation that the CAC made. Our first recommendation for standardized certificates is now going to happen ten years later. That's wonderful, glad to see it.

And also, as a co-author of Soul of Soil, hydroponics is a very interesting, wonderful agricultural tool. It has no place in organics.

Thank you.

CHAIR RICHARDSON: Thank you, Joe, for
your comments. Questions, comments? Much appreciated, thank you.

Next speaker is Larry Plesent of Vermont Soap. And he'll be followed by Frans Wielemaker.

MR. PLESENT: Good morning. Welcome to Vermont. And thank you for this opportunity to speak with you for three minutes.

My name is Larry Plesent and I am chief formulator and CEO of the Vermont Soap Company right here in Middlebury, Vermont. I did not travel thousands of miles to get here.

I have a great job. My job is to replace yucky stuff with yummy stuff. We see ourselves as making food for your skin. All right.

Since 2003 Vermont Soap has been a certified organic processor. We specialize in topical body, pet and cleaning products. We have brought to market over 100, over 100, certified organic products.

Including pet shampoo, the world's first organic shower gel. Soap based shower gel.
Spray cleaners, foaming hand soap and even an airplane, windscreen installation lubricant made with organic oils.

Vermont Soap supports the re-listing of sodium hydroxide, and its cousin potassium hydroxide, with the following comments. Even though literally a thousand topical use products have been certified to USDA organic food standards, no mention of this use of organic agricultural feedstock is made on the NOSB allowables list. We're kind of the black sheep of organics right now.

We, personal care products formulators using organic ingredients, seek clarification and guidance as we continue to bring to market new topical organics. We need some guidance here guys.

And the area crying for clarification is in fact the use of sodium and potassium hydroxide. Which is up for re-listing. Which we support.

Sodium hydroxide is used to transform, to actually crystalize organic oils, which make you
dirty, into organic soap, which makes you clean. No sodium hydroxide, no measurable sodium hydroxide, remains in the vital product.

Now this is the definition of a processing aid. And in fact I will read the FDA definition, one of the definitions, of a processing aid.

Definition number three. Number three, a substance processing aid. A substance that is added to a food for its technical or functional effect in the processing, but is present in the finished food at insignificant levels and the residual does not have any technical or functional effect on the food.

So in other words, we're having a functional effect on the food. In this case, organic coconut oil for example, to make organic coconut oil soap.

I'll read a second definition. This is the FDA's 21 CFR Part 173. Secondary direct food additives, which is a kind of processing aid.

These are substances whose
functionality is required during the manufacturing or processing of a food and is not present in the finished product. So therefore, to get right to the point, and I thank you for this, so therefore, to remedy this situation, I ask the Board to draft a recommendation to NOP for guidance for certifiers in the industry.

The guidance would clarify that sodium and potassium hydroxide, when used to make certified organic soap, meets the NOP definition of a processing aid, thus allowing the potential to create 95 percent organic soap products.

Because potassium and sodium hydroxide cannot be pulled out of the final ingredient, like --

CHAIR RICHARDSON: Can I shut you off?

MR. PLESENT: -- like raisins from granola --

CHAIR RICHARDSON: All right.

MR. PLESENT: -- we ask that it be classified as a processing aid. And I thank you very much.
CHAIR RICHARDSON: Great, that was a very clear presentation. Do we have questions or comments? Do you want to, you don't want to make a comment? Okay. Good, thanks very much, Larry.

MR. PLESENT: Thank you.

CHAIR RICHARDSON: The next presenter is Frans Wielemaker. And he'll be followed by Luis Monge.

MR. WIELEMAKER: Thank you Chairman and Michelle. Thank you for giving me the opportunity to address the NOSB Board and this distinguished audience. And yes, once again it's ethylene that I'm going to talk about.

Let me introduce myself. My name is Frans Wielemaker and today I'm an independent consultant. I have worked banana and pineapple growers in Mexico, Central and South America and the Caribbean in R&D, production, quality, marketing and organic certification for the last 36 years.

I'm here today specifically petition for the continued views of ethylene for banana
ripening and handling in the 205.605(b) category. Which has already been endorsed by the subcommittee. We've also sent in a written petition.

I will here also reach out to my pineapple friends who, as you know from the sessions from yesterday, also want ethylene to stay on the list for crop production. I also want to make this lobby for the organic retailers and the organic consumers in general. We need bananas and pineapples to stay in stores as an organic option.

I sort of feel responsible for ethylene being on the list, because I petitioned for it in 2001. We had a few struggles over the last 12 years, but I didn't think it would become an issue again.

In fact, it's frightening to see that every five years we have to come here and fight for our livelihoods again. We need security and continued approval over sensual inputs.

Ethylene is a natural substance. And it's precisely ethylene that we need to ripen fruit
and initiate flowering in pineapple.

So you can see how simple a molecule ethylene actually is. And when you go to Wikipedia, you can read about it. And it's one of the most essential plant hormones that exist.

Since the approval of ethylene, or since the approval of the NOP rules and ethylene got approved, the banana and pineapple industry has boomed. Today organic banana farms and organic pineapple farms have increased production to about 28 million boxes of bananas and three million cartoons of pineapples.

CHAIR RICHARDSON: So --

MR. WIELEMAKER: Organic bananas were hardly available in stores 15 years ago. Today they are in every self-respecting store.

CHAIR RICHARDSON: Great. You're wrapping up how?

MR. WIELEMAKER: Yes.

CHAIR RICHARDSON: Yes? Okay.

MR. WIELEMAKER: And Luis Monge will continue.
CHAIR RICHARDSON: Great, thank you very much. Are there any questions? Any questions? Nope. Thanks very much. Much appreciated.

The next speaker is Luis Monge. Followed by Christopher Anderson.

MR. MONGE: It's good to be back. I lost Day 4 presenting meetings. I lost my hair too. And I'm the same guy that showed the pineapples and the bananas to you guys.

My name is Luis Monge. Now I'm living in Peru. I'm a regional for Costa Rica. I'm running a new organic banana exporting company in Peru.

Why do we want the continual lecithin for banana ripening. Bananas are a climatory fruit, which will not ripen easily when still hanging on the banana tree. At least not until fully grown. And if harvested at that late stage, an unworkable green life period remains for shipping.

Bananas are harvested to enable to
transport them over large distances to the market. At the arrival they are put in a room into which while regulated temperature and humidity, ethylene gas is injected in a controlled way to reach a level to 0.05 to 0.1 percent of the air content.

The ethylene gas, while circulating, goes through all the back banana in boxes and figures a natural ripening and processing in order to have them ripen uniformly to a yellow stage number two. At which -- sorry, at the same time to be delivered to the stores.

This procedure is used around the world in less and modern ripening facilities for both conventional and organic bananas. Mangos, avocados and citrus are also de-greened in a similar fashion.

In mostly poorer countries, where this ethylene gas technique is using a ripening room, is not used. Ripening is done by spraying or dipping bananas in a bath which has ethephon added.

Which is a true synthetic or even with calcium carbide. Which is also a synthetic. And
which emits acetylene, which is the only other molecule that also ripens bananas.

So non-synthetic alternatives to ethylene exist, and we are glad they don't. As it will make the process unnatural.

Ethylene gas has been used for banana ripening since the early '60's. I wasn't born yet. And if operated correctly, nobody has even become sick or have there been health issues reported.

In fact, it is my opinion that ethylene will never again come to a sunset issue, because it is, all it is, is a synthetically produced natural. A category which is not in the vocabulary of the NOSB, yet, but it should. At least for this particular use of ethylene.

Finally, and to finish my presentation, I want to thank the OTA, the EOIA and the OPWC for their support for the continued use of ethylene for both mentioned uses as they have petitioned in favor.

CHAIR RICHARDSON: Thank you very much for your comments, Luis. Are there questions?
Yes, Mac?

MEMBER STONE: Luis, when you were here a few years ago on the pineapple issue, if a grower grows out of organic pineapple production, how involved is chemical input in conventional pineapples?

MR. MONGE: Thank you, Mac. Well first of all I don't consider myself a pineapple grower. Pineapple growers are sitting there. And a firsthand answer will much better be an answer by them.

But in my opinion, well pineapple, a conventional cultivation is a high input. The plane, activity. In fact, it's a whole different world.

And all kind of allowed synthetic, a molecule that's safe. Molecules, I mean convention. The convention are used for sure. Meaning insecticide, herbicide, a fungicide, everything.

And so it will be a whole different work for a farmer to come or to go from organic to
conventional. That is not meaning that they are
going to be unsafe by the way.

I mean a pineapple cultivation, at
least in Costa Rica, is a very regulated industry.
That is a whole different thing.

CHAIR RICHARDSON: Thank you very much
for your comments. Much appreciated.

MR. MONGE: Welcome.

CHAIR RICHARDSON: The next speaker is
Christopher Anderson. And he'll be followed by
Jennie Landry.

All right, that person already has
gone. Jennie Landry, are you here? Jennie?
Okay, you're up next. And Jennie will be followed
by Jeffrey Bogusz.

MS. LANDRY: My name is Jennie Landry.
I represent DSM Nutritional Products. The world's
global leader in production of omega-3 EPA and DHA
based products.

DSM strongly recommends a re-listing of
fish oil to the national list as non-organically
produced ingredient in or on processed products.
labeled as organic.

Omega-3 fatty acids, primarily EPA and DHA, benefit human health by contributing to healthy brain development and reducing the risk of cardiovascular disease. Evidence supporting these benefits span past four plus decades and remains favorable.

Organic consumers recognize the benefits provided by omega-3 EPA, DHA from fish oil. And should have access to products made with non-organically produced fish oil. Since organic fish oil currently does not exist.

Fish oil is a naturally sourced value added byproduct of the fish meal and edible canning industries. It is highly inaccurate to suggest that fish oil production will contribute to global extinction of the fish species as fish are not caught for their oil.

As for the fisheries themselves, the FAO publication referenced in the subcommittee's fish oil recommendation overall generalizes the state of the fisheries. It would be more accurate
to look at individual stocks, countries and fishery regions.

DSM only sources fish oil from government regulated fisheries where provisions are in place to protect fish stocks. The Peruvian anchovy fishery produces the most fish oil worldwide. And is also the most highly regulated and sustainable fisheries in the world.

There have also been statements made that the health risk from the consumption of fish oil may outweigh the benefits of omega-3's in fish oil. This is highly inaccurate and unsubstantiated.

There are several recommendations from health authorities internationally supporting the consumption of fish and fish oils for their health benefits.

According to the dangerous goods advisory council, neither the risk, the mercury nor organic pollutants outweigh the benefits of seafood consumption. Therefore, if there was minimal risk, with regards to consumption of fish,
fish oil is far less of a concern because modern
technology reduces the level of contaminants far
below the levels that would be present in fish.

The global organization for EPA and DHA
sets contaminates limits based on the strictest
global regulations where -- which are mandatory for
coed members.

Finally, to touch on the topic of
organic alternatives. It has been suggested that
flax and chia seed oils could be considered
alternatives because they contain relatively high
sources of omega-3 fatty acids.

It's crucial to know that the
predominate form of omega-3 in these sources is
ALA. ALA has not been proven to demonstrate the
same level of benefits as EPA and DHA.

And while ALA can be converted to EPA
and DHA in the body, the rate of conversion is
highly inefficient. Therefore a marine based
omega-3's are the most economical choice.

In closing, DSM strongly recommends
re-listing fish oil to the national list. As a
leading producer in omega-3 products, we understand that protecting our marine environment is crucial and are committed to sustainability now and in the future.

We have leading technologies that deliver safe and reliable products and trust that health benefits are scientifically valid and substantiated. Thanks.

CHAIR RICHARDSON: All right. You have a question, Tom?

MEMBER CHAPMAN: Yes. We received several comments questioning the necessity of fish oil. Particularly fish oil being incorporated into products where it's not inherent.

For example, milk glorified with fish oil. Can you respond to those concerns?

MS. LANDRY: It's true that you don't need fish oil in order to make milk or butter. It's not a requirement to make those products.

But we feel that the benefits of omega-3 EPA and DHA are well recognized. And organic consumers are looking for healthy products as well.
And we'd like to potentially benefit from omega-3's. And so they should have the choice to choose those products if they are interested.

CHAIR RICHARDSON: Question from Lisa.

MEMBER DE LIMA: So is all of your oil coming exclusively from Peruvian waters?

MS. LANDRY: It's not 100 percent exclusive, but that is where the majority of our fish oil is sourced from.

MEMBER DE LIMA: So where would the remaining come from?

MS. LANDRY: I don't have the specifics on hand. It's a natural product, so there are fluctuations in terms of profiles that we're looking for, for EPA and DHA.

We have sourced within the same fishery region. All of our sources we evaluate for sustainability. And have to meet minimum requirements no matter where it's sourced.

MEMBER DE LIMA: And are your sustainability requirements set by a third party or those are set internally?
MS. LANDRY: They are analyzed based on the individual fisheries, the regulations that are in place in those fisheries. And are evaluated to those standards.

MEMBER DE LIMA: Have you all looked at algae as an alternative? Not just flax or chia.

MS. LANDRY: Not specifically for this instant for fish oil. There is algal oil that could be used as a substitute under the nutrium vitamin mineral category.

CHAIR RICHARDSON: Thank you very much for your comments.

MS. LANDRY: Thank you.

CHAIR RICHARDSON: Much appreciated. The next speaker is Jeffrey Bogusz. And he'll be followed by Phil LaRocca.

And just a quick sort of time check here, obviously we're not going to be finishing at noon. I'd like to take all of the public comment speakers before we break for lunch. So we have 16 more to go, including Jeffrey.

MR. BOGUSZ: Good morning. I'm Jeff
Bogusz and I work for the Ferrara Candy Company. We're a manufacturer of gummy bears and fruit snacks.

Just began making organic versions in August. And at this point in time there are several items integral to our brands that are not available in organic form. Others have limited availability or problematic functionality.

Gelatin, pectin, agar, citric acid, carnauba wax, shellac, flavors and colors are currently all justified as being on the list. And I want to take my three minutes to talk about colors.

I've heard from some that -- someone said the comment, I can go to any Walmart in the United States and buy organic grapes. Surely there are enough organic grapes for making colors. That sounds wonderful, however there is more to it than that.

The varieties that are grown for color specific applications tend to be different than those grown for food. They're not selected based
upon flavors, they're selected based upon the color yield.

And then there's also other unique things like, for example beets. There are some varieties that produce a color that works well in a low pH product, like yogurt. There are some variety of beets that produce that color that works better in a high pH product, like a bakery product. So there's a lot of individuality here among the varieties grown.

In the case of perennials, it would be possible for production to move to organic within one year. But for items like grapes and cherries, it will take at least three years to develop an organic supply, if there isn't something in the works right now to transition that.

In addition, the color yield from organic crops I've heard is constantly lower than conventional. And when I've challenged people as to why and for specifics, I haven't really gotten what I consider an adequate response.

What I think that this is more is almost
fear. It's a matter of people aren't familiar growing these crops on a large enough basis to know what the yields truly are.

And when it comes down to it, I think that what we really need is more time. So what I'm going to suggest is that you go ahead and pre-approve all of the colors that are on the list right now, but then instead of waiting five years to review them again, review them in two or three.

Then things that look promising, and there are several that are promising, could potentially be removed from the list in two or three years. But that gives industry three to four years to actually prove the systems out and develop the supply, have multiple crop years to prove that the best ways in order to do that, before it's actually a specific requirement.

This added time is also going to allow producers like us to change our labels, if necessary, or to use up old packaging before a change is actually required.

As it is right now, as I see it, I've
talked to many color manufacturers and they tell stories of a customer anticipating a large demand for a color and then actually being stuck with that color when the actual demand doesn't materialize. So they're a little bit shy in terms of actually going ahead and exploring their options.

Having a larger time window would be great for everybody involved and will get things off the national list sooner.

VICE CHAIR FAVRE: Thank you, Jeff. Any questions for Jeff? Tom?

MEMBER CHAPMAN: Briefly. Can you, I know you guys are fairly new to organic. I think you said the last nine months or so. Can you briefly explain your efforts to source organic colors?

MR. BOGUSZ: So in terms of organic colors, we have looked at several options. Organic red carrot are actually the most promising for us. But the supplier that we're dealing with has a very limited supply this crop year. I'm expecting that we're going to be using red carrots
next crop year.

Orange carrot has actually been a relatively unique experience with our product. We've actually had problems with it actually developing a metallic sheen on our finished product that we don't quite understand. Sometimes it happens and sometimes it doesn't. And are kind of working with our supplier to understand that.

And have also evaluated organic turmeric. And actually could use that but aren't necessarily all the time. Because of availability constraints in a turmeric that has been washed to a level where the color or the flavor isn't going to be, have an impact in our product. So sometimes we're using organic turmeric and sometimes we're not.

MEMBER CHAPMAN: Okay.

VICE CHAIR FAVRE: Any other questions for Jeff? Thank you. Next up is Phil LaRocca. Followed by Bill, excuse me, Beth Unger.

MR. LaROCCA: Good morning. My name is Phil LaRocca. And I have been an organic farmer
for 44 years.

The last 32 I've been the owner and wine
maker of LaRocca Vineyards. And I also sit as the
Chairman of the Board of Directors for CCOF.

I want to start by encouraging this
Board to be vigilant on the GMO issue. The organic
farmer seems to be put in a position of always
having to defend themself.

And I felt earlier that Will Allen
answered Zea's question of, what we need to do,
quite well when he responded by saying, I think we
need to have the NOP put pressure on the USDA. And
the best way to do this is to put pressure on the
aggressor by some kind of fine or penalty.

People tell me, well this will never
happen. However, we have this, an attitude that
it never will happen, it never will happen.

But for the sake of the organic farmer
and the sake for the organic community, we have to
do something about this pollution that we're seeing
in the organic industry.

With that, briefly I want to add
something. We need to also promote, which we do at CCOF, that the USDA organic does mean non-GMO.

Recently our company, we sold some bulk product and the company wanted not only our proof of certification, but our non-GMO verification. And so we had to argue, a waste of time.

And finally we blew up our CCOF logo which says, organic non-GMO and more. We finally convinced them that being certified organic also means non-GMO. We don't need a separate certification.

My next point, I'm going fast, is, Miles, thank you for your eloquent introduction yesterday. Especially regarding enforcement.

Because at CCOF we voted unanimously to get rid of the state organic program. Felt by our California organic farmers that the excess fee and excess paperwork did not give us our bang for our buck. That there were still problems going on.

The argument that people were giving us was that you need them for enforcement. But after hearing the fabulous job that the NOP is doing, I
am more than ever convinced that we do not need this California State program.

For those on the Board that aren't familiar, we are the only state that has this program. And quite frankly, I look at it as an organic tax. Instead of being rewarded with what we do, we have this extra tax that we have to pay.

My third point, which I will just want to end with, I think, on a very positive note, is that we have what's called the Bricmont Leadership, excuse me, Bricmont Hardship Assistance Fund.

As far as I know, we are the only organization in the country that is offering monies for hardship victims that are certified organic farms. And you do not have to be CCOF certified, but you do need to be certified.

And this is across the country. We have extended our period of sign up because of the recent disasters. We have people coming in basically for flood, fire. Obviously the drought.

The best way to get more information on this is to go to ccof.org Bricmont,
B-R-I-C-M-O-N-T, Hardship Fund. And this is open to everybody here.

Please take advantage of it. It's one of the greatest things that we do at CCOF, I think. Thank you.

CHAIR RICHARDSON: Thank you very much, Phil. Questions? From the Board Members. No questions. Thanks, Phil.

The next presenter is Beth Unger. And she'll be followed by Ron Rosmann.

MS. UNGER: Good morning. I'm Beth Unger. I'm here representing CROPP. It's a farmer owned certified organic cooperative that markets products under the Organic Valley and the Organic Prairie labels. We do nothing but organic products.

I really appreciate the fact that you did those webinars this year. That was pretty awesome. And I, you know, I listened in on both of them. I was very interested to hear all the comments.

And I want to point to one of the
comments that I felt was very eloquent. It
tfollowed up on some very complete written comments.
And that would be by Paul Browner of DSM.

He commented on the use of the fish oil.
And answered, I thought, very well the questions
that the Board had presented regarding the fish
oil.

We are, of course, are in support of it.
And I will say that we are in support of it because
we have a line of milk that has omega fortification
through fish oil that we do because we have health
conscious consumers who want it. The consumers
want it.

It's not because, you know, it's like,
oh, that's a great idea. No, they want it.

The other topic is my old favorite,
bacon. Celery powder needs to stay on the list.
We heard you loud and clear. And we are taking a
lot of actions on that.

You're going to hear from some experts,
I am no expert, believe me. But DSM or Kerry
Ingredients is an expert. And they will be up here
to testify in a little bit.

And they, you know, they've done a lot of work, as the other supplier has, in terms of doing trials and looking for ways to do this with an organic vegetable.

But organic process needs are a very important part of meat farmer's livelihood. It's a way to use the entire animal. And that celery powder is what's going to get it done.

We don't use sodium nitrate like Europe does. So we need that.

And in the meantime, you know, the OTA has graciously formed the National List Innovation Working Group. We are going to be supporters of that working group.

One of the top priorities on that is going to be looking for organic alternatives to celery powder. And so please keep it on 606 for another five years. Let us get the work done. And we will come back with a success story to you. That's all I have for now. Thank you very much.

CHAIR RICHARDSON: Thank you very
much, Beth. Question, Nick?

MEMBER MARAVELL: Yes. Could you talk a little bit more about what you're doing to seek alternatives? What's on the horizon, what are the prospects, what areas you're going into?

MS. UNGER: Nick, I'd like you to ask that question to the experts that are coming. We're a user, you know. So we don't have any other alternatives.

In terms of doing processed meats. And that's including the bacon, the ham, the hotdogs, the pepperoni, the beef jerky. And our new product, the mighty bars. We're using that as the so called churring agent.

MEMBER MARAVELL: Yes. Well I ask you advisedly, because I'm also a livestock producer and produce livestock products. Including things like sausage and jerky. And we don't use it. But, you know, we do other things.

So I'm just trying to figure out where your critical needs are. Is it more useful in, let's say pork than it is in beef?
Are there ways that you can minimize your reliance on the celery powder now? That's where I'm trying to go with it.

MS. UNGER: Yes. You know, I'm also not a food scientist. But there -- it's used for a number of reasons. You know, it's that curing. And it's also a food safety and, you know.

So you're looking for the technical and functional effects. And also, you know, the expectation of a bacon or a ham. Sorry, I wish I could give you more about that.

CHAIR RICHARDSON: Well, maybe some of the other ones coming after you could do.

MS. UNGER: Yes.

CHAIR RICHARDSON: Great, thanks very much, Beth. Oh, sorry Zea.

MEMBER SONNABEND: Thank you, Beth. You, in your written comments, you put a dollar value on your sales of the fish oil fortified milk. But I'm more interested in what percentage of the overall milk sales is the fish oil fortified milk or is it, you know, how many consumers? One in ten
consumers, one in three, one in, you know, a
percentage as overall milk.

MS. UNGER: I cannot give you an
accurate answer. I would say it's a relatively low
percentage.

MEMBER SONNABEND: So it's small
compared to your general milk sales?

MS. UNGER: Yes. That would be
correct.

MEMBER SONNABEND: Thank you.

CHAIR RICHARDSON: Tom? Sorry, Beth.
You got one more, Beth.

MS. UNGER: Oh, I do?

MEMBER CHAPMAN: I have two questions.

Sorry. Can you also address the question I asked
a little bit earlier about necessity of fish oil
in products that don't have it inherently in
formulation?

So we've received a public comment
about whether fish oil is actually necessary and
meets the alpha criteria around necessity when it's
used in applications where it's not inherent to the
product. Like milk fortified with fish oil.

MS. UNGER: Okay, I need a little clarification, Tom. Are you asking about why fish oil and not algal oil? Is that your question?

MEMBER CHAPMAN: I'm asking how you -- why you think it's necessary.

MS. UNGER: It's not necessary. It's a consumer preference. You know, it's a line that is out there for the folks that really want to have the omega fortification in their products.

MEMBER CHAPMAN: Okay. And then I have another question. Can I ask you about sodium phosphate? You commented on that in your written comments.

MS. UNGER: Yes. Yes. And so on the sodium phosphate, basically I wanted to answer your question about, is it on the label. And it is disodium phosphate is in use at one of our processing facilities in the ultra-pasteurized heavy cream.

And the reason that it's in there is it's about the type of processing that they're
using. And they need it for, you know, to prevent the coagulation or whatever in this tubular system. So the heavy cream that comes out of that facility clearly has that labeled on it.

I personally would prefer that they could switch over to a different system like all the other plants. But I think we have to be able to increase our throughput and make it reasonable for them to change their processing method.

MEMBER CHAPMAN: What would the implication be on your business that sodium phosphate was removed? Like obviously you wouldn't be able to use that plant, is that, you know, what's the --

MS. UNGER: Well, you know, we would either not be able to produce that product at that plant or the plant would have to come to the realization that they need to change their processing method.

CHAIR RICHARDSON: Thank you very much, Beth. Next speaker is Curtis Bennett. And he'll be followed by Seth Gardner.
Oh, I'm sorry. I did I skip Ron? Look at that. So I've got Ron Rosmann and then Curtis Bennett.

MR. ROSMANN: Thank you, Jean. My name is Ron Rosmann and I'm here on behalf of Organic Prairie.

My wife Maria and I are certified organic crop and livestock farmers near Harlan, Iowa in the western part of the state. We've been certified on our crops since 1994. Our beef since '98, our pork since 2004. And we quit using all pesticides in 1983. And I'm one of the founding board members of the Practical Farmers of Iowa.

We farmed 700 acres along with two of our three sons. And we are very lucky and blessed to have two of our three sons farming with us.

We also operate a nearly mostly organic restaurant in our local community of 5,000. And we have a retail store on our farm. And also a farm table delivery service picking up produce from Western Iowa and Eastern Nebraska farmers. So we have a lot on our plate.
But I'll have to say, I've learned more about celery powder in one week than I've known in my 65 years of living, prior to this. And that's not saying much. There's a lot to learn.

So we have 90 cows about and 40 to 50 sows. But we also have our own meat label business, Rosmann Family Farms. So this concerns us not only as a member of a Co-op, but our own business.

So we really have the best of both worlds as far as business model goals. And our own business is thriving and expanding. Dramatically.

But why do I think this is important to keep celery powder? Well in Organic Prairie, 55 percent of all the organic pork uses celery powder in its products. And as a food -- as a preservative.

And as Beth pointed out, Kerry Ingredients will be up here soon to talk about how they've been experimenting with organic celery powder and other vegetable alternatives. It
appears to me at this time that the nitrate levels are not consistent enough in organic celery powder to keep the meat safe compared to conventional commercial celery powder.

This may be due to the high levels of nitrogen fertilizers used in conventional celery. But the research thus far has shown that to have acceptable levels of nitrates, large amounts of organic celery and other vegetables have to be used, which gives the meat, the vegetable, an undesirable taste.

So we need more time. More time is going to be needed to research alternatives to develop organic ingredients for acceptable levels of meat preservation.

The sunset of conventional celery powder would have a devastating effect on the organic meat industry. Much less of the carcass would be able to be utilized and profitability would lessen dramatically for the cooperative and for growers such as ourselves. Thank you.

CHAIR RICHARDSON: Thank you very
much. Questions? Yes, Nick?

MEMBER MARAVELL: Yes, Ron, good to see you here. Do you use the celery powder in your private label? In Rosmann Family Farm. Do you use the celery powder?

MR. ROSMANN: No we do not. Because unfortunately, even though we have a certified organic pork operation with our own label, our local slaughtering plant is not willing to go organic, so we do not label our meat as certified organic. Of course people know that it is.

So if you take away conventional celery powder, we are looking into shipping our bacon and hams about 130 miles to Central Iowa, to get them made into celery powder bacon.

The logistics of that, well won't be very much fun of course. Maybe we can use our farm table delivery service. But we are looking into it.

So if you take celery powder away now, it's going to be even harder to do that. It's going to take time. And I fully understand and
appreciate that we have to keep the organic, both
the organic integrity and the meat safety
integrity, of all meats.

We just heard about it yesterday.
About meat being a carcinogen in the popular press.
But do we want to go back to salt pork as the only
way to preserve meat? I don't think so.

And like you say in your business, you
don't need celery powder for jerky or for sausage,
but you do need it for hams and bacon. And you know
bacon is, the demand for bacon is increasing
dramatically in this country. So we got to figure
out how to keep the organic integrity and the meat
safety of it.

It's just going to, like Beth said,
we're going to deliver, it's just going to take some
more time.

CHAIR RICHARDSON: Yes, Mac?

MEMBER STONE: Ron, if you're now a
celery powder expert this week, do you know whether
they're using off grade celery to make this or are
they growing it specifically for the powder?
MR. ROSMANN: I have just learned from Kerry Ingredients last evening, that they grow it specifically for the powder, not for human consumption.

So that's a whole different -- and it's grown mostly in South America and in Europe. So that there would be a whole different list of growing protocols needed as well.

You know, it's just not like you go out and use any organic celery for human consumption and do this. It's more complicated than that.

CHAIR RICHARDSON: Yes, Jennifer?
MEMBER TAYLOR: Thank you so much for your presentation.

MR. ROSMANN: You're welcome.
MEMBER TAYLOR: I just had a question. What do you think has minimized the process and the change previous to now?

Why do you think that the change has been stagnant on the part of the growers or on the part of the processors or wherever that change can take place?
What do you think has been the hindrance thus far?

MR. ROSMANN: Well I think it's been tough to develop sales for organic pork, for instance, in general. Organic Prairie, you know, there's not many companies producing organic, making organic pork available.

There's very few small producers even curing their own products. So that's one issue.

I think Organic Prairie and Kerry Ingredients could better answer the question as to why, you know, the specific use of different preservatives is the way it is. I don't have any good knowledge on that part of it.

But I can say after being an Organic Prairie producer for many, many years now, getting the organic meat business going on a large scale, where you can utilize the whole carcass, which we do have to do to be profitable and to be profitable for the livestock farmers, that's the first goal.

So, you know, we need more livestock in organic farm operations, there's no doubt about it.
Because of the beauty of the integrated system.

So why it's lagging? Good question.

I can't really fully answer that.

MEMBER TAYLOR: Okay.

CHAIR RICHARDSON: Thank you very much, Ron.

MR. ROSMANN: You bet.

CHAIR RICHARDSON: The next speaker is Curtis Bennett. And he'll be followed by Seth Gardner.

MR. BENNETT: Hi, thank you. My name is Curtis Bennett. I represent Clarkson Soy Products.

We are the pioneer of organic lecithin. We began the organic lecithin journey in 1999. And first made it commercially available in 2004.

Not one company in this room can honestly say they have tried to purchase de-oiled organic lecithin from Clarkson and not had the order filled completely.

Commercial availability criteria must be redefined. Every certifier in this room knows
de-oiled organic lecithin is available and yet they grant waivers every day to their clients to evade paying more.

Unfair to companies that follow the intent of their organic ingredients available, you must use it and compete for shelf space with companies granted waivers to use the rabbit holes in 205.605 and 606. Unfair to organic consumers who are unaware the product they are consuming with the USDA organic logo contains volatile solvents.

Why was organic de-oiled lecithin so easily dismissed by the Handling Subcommittee at the spring meeting in La Jolla, to sunset. Isn't it the goal and the job of the NOSB and the NOP to remove items from the allowed list once they become available?

Subcommittee voting must stop. The entire NOSB must vote and be heard. I ask the NOP to sunset all lecithins now and in the future.

Only if the rabbit holes are filled will you stop over expecting to evade paying more for organic ingredients.
If pioneers who see 205.605 and 606 as opportunities are not rewarded, no settlers will follow. We feel it's the responsibility of the NOSB and NOP to remove items, not continually add to them.

Do we know when -- where soy is? There's a lot of talk about an allergen. Everyone's heard of the big eight allergen list.

Do you know where soy is on that list? It's not number one, it's not number two, it's not number three, it's not number four, it's not number five, it's number six.

Number one is peanuts. Number two is tree nuts, followed by dairy, eggs, fish. And then you can find wheat. I forgot wheat. And then you get to soy.

Only two percent of the public has a soy allergy. Ninety-five percent of those people allergic to soy have some type of intestinal disorder. If they didn't have that, they wouldn't have allergic reaction.

They're only reaction is to the protein
in soy. Soy oil, soy lecithin, all highly filtered products do not contain the protein. So there is no allergic reaction. Thank you.

CHAIR RICHARDSON: Thank you. I have two questions. Tracy and then Tom and then Zea.

VICE CHAIR FAVRE: Can you give me a sense of how much sunflower lecithin there is and if there are any other suppliers out there?

MR. BENNETT: Well, since the April meeting, there are now three different processors in the world that are moving towards making organic sunflower lecithin.

One is a very small facility in Ukraine that is making both liquid and powder. Followed by India, followed by China.

CHAIR RICHARDSON: Next question is from Tom.

MEMBER CHAPMAN: Actually I have four, but they're quick. What is the marketed demand currently for organic de-oiled lecithin in terms of volume?

MR. BENNETT: Currently today the
volume is ten metric tons per week. If you consider the inclusion rates of lecithin in mainly baked products, baking products, cookies and so forth, use the de-oiled, it's somewhere at -- well if your using liquid lecithin it would be 0.3 in percent. Since de-oiled is a concentrate it would be something two-thirds less than that in your formulation.

So it is so minute, it has a lot of benefit to the product. And that's why it is such a sought-after ingredient.

So if you look at the sheer scale, U.S. is the biggest market, followed by Europe obviously. So --

MEMBER CHAPMAN: And now what is your capacity to the supply of organic --

MR. BENNETT: Currently it's ten metric ton.

MEMBER CHAPMAN: Okay, so what's the market demand for organic? If we were to remove this requirement and everyone had to source organic lecithin, what's the size of that market?
MR. BENNETT: Well globally it's five percent of the total lecithin market. Is it de-oiled? Then you break it down from there. Do I know what the world market size is? No.

MEMBER CHAPMAN: Okay.

MR. BENNETT: But I'm telling you without supporting pioneers, there will be no settlers. If you look at, when is this supposed to sunset? 2017, right.

So how much time do you have for settlers to get in a line? Depending on what you guys do in this room right now and what the NOP does to get in line.

Sure there's going to be competition. We want competition. It makes it more available and it makes the price go down, right? That's why we're here.

MEMBER CHAPMAN: One more. Can you help me understand why, I mean you keep speaking about the rabbit hole and vendors not being incentivized to switch. However, commercial availability criteria has been successful in
several cases.

Chia seeds the Board has unanimously, or the subcommittee has unanimously requested that get removed. Industry. Everyone's agreed that that's now available. However, that was on the national list.

Companies already switched to using organic chia seeds. There's several other examples. Peppers, lemongrass.

Why is it successful in those cases and why can it not still be successful here with lecithin?

MR. BENNETT: I have no idea. I wish I could answer that question.

I mean we first approached the NOP in 2006 to ask or excuse me, the NOSB, to ask that organic lecithin be removed from 605 and 606. We failed.

We came back again two years later. Failed again. Came back a year later, finally got the support of the NOSB to make the recommendation.

The NOP did not a make the requirement
in 2012. Three and a half years ago that organic lecithin must be used. Today there are still organic certifiers allowing waivers that organic lecithin not be used.

The commercial availability has to be redefined. Because it is so loose right now. Every day, every day I get an email from somebody saying, hey, I need you to say that this is not available. You know, from our organic certifier.

If I don't write that, you know, they'll go to somebody else. They'll go to a trader, a broker, someone that they absolutely know doesn't supply this ingredient.

It's being followed. The criteria is being followed. They get three emails the organic certifier looks at and says, okay, everything has been filed, here's your waiver. That's how it's working now.

It's got to be redefined, people. This is not --

CHAIR RICHARDSON: Zea, you have a question?
MEMBER SONNABEND: Thank you. Okay, you have me kind of pissed off.

MR. BENNETT: Well, you kind of have me pissed off too.

MEMBER SONNABEND: I'm going to try and remain civil here. But I am one of the two percent of people who is allergic to soy and peanuts and very allergic to lecithin. And I get an anaphylactic reaction when I eat soy lecithin.

And it has nothing to do with something else wrong with my bowels. I do get an allergic reaction, although not as severe from runny egg yolks, which are also high in lecithin.

So to generalize that this is only two percent of the people and that they have some bowel problem is kind of pissing me off.

But beyond that, besides hearing from you at the spring meeting, we heard from other testifier's who wanted sunflower lecithin and said that organic de-oiled sunflower lecithin was not commercially available. And I noticed you said there were companies moving towards supplying, but
you did not say they are currently supplying sufficient organic sunflower lecithin.

MR. BENNETT: One of them is.

MEMBER SONNABEND: Okay, one company is. However, my perception from asking this question over the years is that the supply is fragile and has gone in and out of production and up and down in availability.

So that being said, and the being able to separate soy lecithin from sunflower lecithin in the structure of what it takes to do an annotation change, along with the rest of it, has made us put forward the re-listing proposal. We would be happy to entertain a petition to change the annotation to be from sunflower sources only after this sunset review is over.

But at the moment we're just not capable of doing that. And there are many other people like me, maybe two percent of the population, who really have to look for sunflower lecithin in products that we buy.

MR. BENNETT: I appreciate your
comment, but I disagree. Because soy lecithin is filtered. The proteins that you're allergic to are removed in the processed.

MEMBER SONNABEND: Then I'm not allergic to proteins; I'm allergic to something else in lecithin.

MR. BENNETT: People are only allergic to protein. Soy protein. That's the only allergen there is in soy.

CHAIR RICHARDSON: Maybe we could move to the next question, I think, which is from Nick. Nick, do you have your question?

MEMBER MARAVELL: I think most of it has come out already.

CHAIR RICHARDSON: Okay, we are now more than one hour behind time. So we're going to be sitting here for quite a long time. So please be thoughtful about the out-of-scope questions.

I know all the questions are important and I don't want to shortchange anybody. But I would like to move on to the next speaker at this time. And that's Seth Gardner.
MR. BENNETT: Thank you.

CHAIR RICHARDSON: And Seth will be followed by Cameron Harsh. Thank you very much, Curtis.

MR. GARDNER: I'll make this quick. My name is Seth Gardner, I'm a dairy farmer. Organic dairy farmer in East Montpelier, Vermont. We milk 300 cows. We have 300 head of livestock. Six hundred head altogether. I've been organic since 2006.

Thank you for allowing people to comment on all these proposed changes. I just want to tell you that my goal is to speak about these various substances. My goal in my life on my farm, is to keep my animals as healthy as possible. So this is why I'm here.

So I'm going to go down through a list on the substances that we use or have used or potentially could use on my farm.

The first one I'd like to speak about is parasiticides. There's three here listed. Ivermectin, moxidectin and fenbendazole.
The proposed change, it looks like to me, is ivermectin would be removed and moxidectin could be removed. And fenbendazole would be the one that would be left.

We've only used ivermectin on my farm. We used it last year on two animals out of 600. The reason we used ivermectin, it was available, it was an emergency, we needed it. We went to the local store, we bought it.

We followed all the withdrawal that was appropriate. We used it on young animals because the 90-day withdrawal on large animals of course won't work, because we're milking those cows. So we only used it on the young animals. We used it on two.

And I feel that the impact on the dung beetles is so minimal that that ivermectin should stay on the list. Just because it is available and the impact on the dung beetles is minimal.

So moxidectin is the same. They're talking about shortening withdrawal time, which is great. Then we could use it on a dairy cow.
We could withhold our milk for the proposed five days, then put her back in the tank. That would be wonderful. Right now the 90 days does not work.

And I just want to emphasize. When we do use a parasiticide, it's only used on an emergency basis. We use all the other things on our farm to minimize any kind of parasites. We do the rotational grazing, we clean everything thoroughly, we do everything we can.

But in an emergency, it is fantastic to have this tool. I want to emphasize that. We need the tool. The animals, we want to keep them healthy.

So going down -- whoa, it's that quick. Poloxalene is the best thing for bloat. There's science that's says, well it looks like it's the best thing to use for bloat. We've used it occasional, we want to keep it on the list.

The procaine and the lidocaine, it says we would like -- they would like to reduce withdrawal, I'm in full support of that. Reduce
withdrawal time to five days. Science supports it, we would like to go with that.

And the last thing I'd really like to speak about is copper sulfate. We use it on our farm routinely. We need it for our cows. They get lame. Copper sulfate prevents lameness.

When dairy cows go lame, it is not good. We keep them in the barn, we trim their feet. We want to prevent lameness and copper sulfate is a fantastic tool. We need all the tools we can to keep our cows sound.

And the other, one of the points about the copper sulfate is where we have too much in the soil. We don't in Vermont. It's copper-deficient.

We spread the manure far away. As an organic farm, we don't concentrate the manure in certain fields. We spread it in many fields all over the place. That's one of the great tools we have to improve soil fertility.

CHAIR RICHARDSON: Thank you, Seth. I have a question from Tracy.
MR. GARDNER: Yes.
VICE CHAIR FAVRE: Actually I'm pulling a Tom, and it's a two-parter. The first one is, if you did not have access to ivermectin, could you use moxidectin?
MR. GARDNER: We could.
VICE CHAIR FAVRE: Is it available and could you get it on an emergency basis?
MR. GARDNER: I think it's available and it's a good question. It's just that ivermectin has been the most common treatment in, around our area. So that's when you can go to the store and buy it.
And I think moxidectin we could get it, if we had to. It's just usually on an emergency. We're like oh my God. And so we run to Tractor Supply or Agway, they have it. So that's why we buy it.
VICE CHAIR FAVRE: Okay. Second follow-up is about the copper sulfate.
MR. GARDNER: Yes.
VICE CHAIR FAVRE: Do you use that as
a footbath or you use it as an application for individual animals?

MR. GARDNER: Footbath.

VICE CHAIR FAVRE: Okay.

MR. GARDNER: Yes. A hoof bath is effective. And if you've ever picked up a cow's foot, you would rather have the cow walk through the copper sulfate liquid. It's much easier on everybody.

If you're going to start tying up cow's feet and apply the copper sulfate, time consuming, dangerous, et cetera, et cetera. You want to use it as a preventative, which means walk through it.

VICE CHAIR FAVRE: And do you leave it out all the time?

MR. GARDNER: No. We rotate it in and out. Yes.

VICE CHAIR FAVRE: Thank you.

MR. GARDNER: Thank you. Any other questions?

CHAIR RICHARDSON: Seth, thank you very much for an excellent and very clear
presentation. Much appreciated.

MR. GARDNER: Thank you very much.

CHAIR RICHARDSON: Thank you. The next presenter is Cameron Harsh. And he'll be followed by Beth Jones.

MR. HARSH: Good morning. My name is Cameron Harsh. I'm a researcher for Center for Food Safeties Organic and Beyond Program.

CFS supports the removal of synthetic methionine from the national list. The continued re-listing has inhibited the pursuit of alternatives. Its removal will drive market development of non-synthetic feed as desired by our organic poultry producers CSF has spoken with.

The organic poultry industry has manipulated the methionine content of feed to spur high growth rates and productivity. If promoting basic healthy development is the goal, then less methionine is sufficient.

Research show that chicks fed diets with low non-synthetic methionine levels have lower mortality than chicks with increasing
amounts of DL-methionine.

Synthetic methionine rich diets resulted in greater and faster weight gain, illustrating its role as a growth promoter. Natural methionine sources are available, such as, but not limited to, rice, grapeseed, alfalfa, flax, peas, insects and whey.

Industry claims that none of these alone provides an adequate replacement. This argument pivots on the desire to maintain current high levels achieved with synthetic sources.

CFS recommends prioritizing research to ascertain methionine levels required to maintain bird health, assessing insect proteins and identifying feed formulations that combine multiple plant or animal sources.

Parasiticides must be used only as a last resort. Organics' emphasis on holistic whole herd health provides a strong prophylaxis against multiple animal health problems.

Organic regulations allow parasiticides for emergency treatment when
preventative strategies have not succeeded. Clarification is needed as to what constitutes emergency treatment and the range of preventative and natural curative options that should first be used.

Ivermectin should be removed from the national list due to its toxicity.

CFS strongly urges, sorry, CFS strongly opposes the current broad category listing of nutrient, vitamins and minerals. To permit substances that do not individually undergo the legally mandated materials review process contravenes OFPA.

The current listing has allowed nonessential synthetic and non-organic ingredients not on the national list, to be illegally included in organic foods. Even substances rejected by NOSB have turned up in organic infant formula and baby foods without penalty.

NOSB must ask NOP to clarify that all synthetic and non-organic substances must be
individually petitioned and approved by NOSB.

Many substances listed under 205.606 are produced organically in sufficient supply, as described in further detail in CFS's written comments.

NOSB should remove these substances from the national list and require producers to source organic forms instead.

CFS supports the removal of fish oil because its production is incompatible with organic principles. Harvesting of pelagic species is contributed to global stocks being fully fished or over fished.

Further exploitation of vital marine resources is not an option for organic because of the unsustainable practice endangers the marine food web.

Contaminates in fish oil also make it incompatible with organic. Analyses of supplement samples have consistently found levels of mercury and PCDs posing an unnecessary health risk.
Research also demonstrates that consuming fish oils, via supplements or processed foods, does not confer the health benefits attributed to consuming fatty and oily fish. CFS urges you to remove fish oil from the national list.

Thank you.

CHAIR RICHARDSON: Thank you very much. Questions? No questions. Thank you.

MR. HARSH: Thank you so much.

CHAIR RICHARDSON: The next speaker is Beth Jones. And she'll be followed by John Ashby.

MS. JONES: Good morning. I'm Beth Jones. I'm Dr. Jones from Kerry Ingredients. And I'm here to talk about celery powder and keeping it on the NOSB list.

I want to thank you for giving me this opportunity to speak to you. Kerry did submit a letter to the subcommittee earlier this year on this topic. And in that letter it was our position that we recommend that celery powder be kept on the NOP list for use in processed meats.

And what I want to do today, and just
take a couple minutes. And I clearly get the feeling there's a lot of questions on this.

So I'm going to leave a few more minutes or minute or two extra for questions that had popped up with some of the earlier speakers. And also give you more time to ask me questions.

What Kerry Ingredients has done over the years, and we started a lot of this work back in 2008, of looking for an organic suitable vegetable powder. And I'm using the word vegetable powder because we looked at other things other than celery.

There are other vegetables out there that do contain nitrates, and so we wanted to broaden that view that we were looking at and the opportunity to look at other things.

We've looked at celery powders, we looked at celery juices. We've looked at up to eight different suppliers of those products in organic, none of them came back consistently. And all of them did have some functionality difficulties.
And I'm going to say functionality difficulties, because it's not always just the nitrate. Sometimes it is a flavor, sometimes it's a color that comes through the meat. And nobody wants to eat a green ham.

I mean when it comes down to reality, we have to provide a ham or processed meat that looks as the consumer wants it to look. It needs to taste like the consumer expects a ham to taste.

And we also need to provide the sufficient nitrate level for food safety. And I think that's one of the topics that hasn't come out earlier this morning, is the food safety component.

And that's really where the consistency must come in on the raw material coming into an ingredient supplier like Kerry. So we can provide a consistent product to the meat processor so they know that they have the food safety in their product. And I think that's a topic that does need to come out.

Some of the other products that we have looked at, some of the other vegetables. We've
looked at spinach, Swiss chard, bok choy, kale, cucumber, yellow beet, lettuce powder and red beet. Again, they all had issues with either not being able to provide consistency or they had flavor defects in the final processed meat.

So what does this take me to? What have I learned over these seven years of working in this area of trying to find an organic product to replace celery powder?

It really comes down, in my mind, that we don't know how to grow it for this application. Oh my gosh. And that's really where, when Beth was talking about the consortium, that's what we want to do.


MEMBER MARAVELL: That doesn't sound like a very positive prognosis for finding an alternative to the current celery powder situation.

MEMBER MARAVELL: And I just, let me comment here. And the please take all the time necessary to respond.

And then number two, it would appear that organic celery powder will not generate what you're seeking, is that -- am I correct in that assumption as well?

MS. JONES: Correct. And I think the issue -- let me first go back to, it's not a very optimistic position. And I was questioned last night on that. And I take a different view on that.

Mainly because if you go and probe the suppliers that are out there for the traditional processed meat market and you ask them, how do you grow your celery stock. They know the specific varietal they want, they know the soil conditions they want, they know the climate conditions they want. They know everything that they need to know.

We don't have that on the organic side. We don't know, using the organic allowed practices, what we have to have from the right varietal, the climate, the soil conditions. We don't know that.
And so I do think there's hope there.

MEMBER MARAVELL: I might interject that we probably wouldn't recommend that in general, for a food consumption product. Because you would be putting too much nitrate into the product.

We couldn't feed it to our animals for example. It would be bad for us to feed celery like that to our animals. And probably bad for people as well.

So I think there is a problem here. I'm not sure what the solution is, but I don't think organic farmers generally would force that much nitrates into a green --

MS. JONES: I'm not, because I think there are -- and I think the other reason I am optimistic is I have received one sample. It was a small scale sample from an organic producer, that I thought was very helpful. He couldn't tell me how he got that. So you do you get it consistently.

And I think from my position, is really getting back to a consistent level that we know
coming in from crop to crop to crop, within a range. I mean there's always range. But if we can get a consistent level, we can manage that. I can't manage one level here and one level here.

MEMBER MARAVELL: And you're not looking into other areas that would not be vegetable powders or vegetable solutions. You're confining it to the vegetable area?

MS. JONES: Well in terms of what we have done in the past, there are researchers we know looking at other types of technologies. And we are interfacing with them too.

CHAIR RICHARDSON: Yes, Francis, question?

MEMBER THICKE: Are there alternatives to nitrate, nitrite, nitrite for curing meat?

Was mentioned earlier that there was a news report, a big one, that the World Health Organization has talked about processed meat and nitrosamines in cancer. And so is there something else we could use besides nitrate, nitrite?

MS. JONES: If you want a cured meat,
no. And I think we still need to go back to food safety. And there are guidelines that we must meet from a USDA perspective on the food safety of the processed meats.

But in the uncured market, the levels of the nitrites that are used are much lower than what is used on the traditional side. So the processors are working here.

We are working with them to optimize food safety levels, nitrites and everything. But it's a process. And are we there today? No. We'll be a long way in five years.

CHAIR RICHARDSON: Thank you very much for your comments. And for the clarification of a very difficult topic.

Next speaker is John Ashby. And John will be followed by David Will.

MR. ASHBY: I'm John Ashby. Thank you for your work and for tolerating my behavior.

I love organic eggs and ham. I truly like them John I am. I like them in a breakfast nook and nibbled by a babbling brook. This is so
good you just can't beat it. If you don't like it, well don't eat it.

Organic has come rather far. From left coast joke to foody star. But we're one percent. Not 99. This isn't good. It's not sublime. In our case, one just ain't so fine. Two, three, four, five, six. Maybe seven. Brings us closer to organic heaven. But we need some tools, some compromises to keep winning our organic prizes.

Juices, granolas, sweeteners, candy. Wonderful, tasty, nutritious, dandy. Without enzymes so many will disappear, you'll be wondering what happened here.

To consumers taste is prime. Orange, strawberry, raspberry, lime. Kefir, or yogurt may to you seem silly, to lose them to conventional would be a dilly.

Make sure that flavors don't go away, the petition is a way to play while the current products don't go away. Not for a minute, not for a day.

Inerts, inerts, inerts can be improved
we all can say, but certainly not in a day for this complex regulatory game to play.

    Improve we should, of course you bet, but make sure the farmers you don't forget. Do not take any tools away, their needs must be met for them to stay.

    Is there just a few specific cases, there are so many other places where 605, I know, I know, is the tool that let's organics grow. So let's not do Monsanto's work, I'm sure they're not all actually jerks, but they want our threat to go away. And not for an hour or not for a day. And if we're not careful, we could end up that way.

    So please vote things off with great restraint, what we lose isn't their complaint. One percent is rather pathetic, seven percent would be copasetic. So we must work hard at what we know, our world is better when organic grows. Thank you.

    (Applause.)

    CHAIR RICHARDSON: All right, I dare anybody ask him a question. And if you are going to do so, it needs to be in rhyme.
MR. ASHBY:  I can't tell when I was rehearsing, I said out loud once, our world is better when Monsanto grows. And that's like telling somebody not to think about an elephant. I just circle and --

CHAIR RICHARDSON: Well, I hope you submit your written comments. They will be delightful reading this evening I'm sure.

MR. ASHBY: Thank you.

CHAIR RICHARDSON: Thank you, John. The next speaker is David Will. And he'll be followed by Dave Marchant.

MR. WILL: My very first comment here was to thank the Board, but having to sit through three minutes of absolute brilliance, it's very painful to say that after having to follow that.

Also on top of that, then Jena starts the meeting by threatening us Southern California's with very nasty four letter word, rain. So it's been an interesting thing.

Thanks, Michelle, for putting me right
after Mr. Ashby. I love the position.

I have a slide for you. It's absolutely terrible, so I'll submit in comment for you at the end.

But my name is David Will. I'm with the Methionine Task Force Group. And after an earlier speaker I think we're going to change our name to the essential amino acid methionine group. Just to help make sure that's clear.

We had promised back in Anaheim many years ago that we would come and at least keep you updated with the work we're doing and progress that we're making. And in holding that true I am here today for you to give you real brief updates.

Number one, we have paid for and published the Can-Anderson study. It's been peer reviewed and has now been submitted into three journals for publication. And excerpt is up there for you.

One is the potential of world research of all of the potential amino acid replacements that we could look at.
Leading the list is Brazil nuts followed by about eight different egg type products and meat products. Then dropping down to potato and corn gluten. So we're actually going to look at some research further in those.

The second slide that we sent in is of insects and their amino acid availability. We're actually working with Dr. Brad Mullens at the University of California at Riverside. He's an entomologist.

We asked for a study to go out and find out on manure and organic farms what sort of insects and their availability is. We need to work on paring this down because it came up at about a quarter of a million dollars to send grad students. So we're going to have to rework and look at that.

We've also work with AFCO on the availability of including insect and insect meal and chicken poultry and getting that redefined so we can do so. However, we've been approached by the FDA. They have serious concerns about our doing this and putting that in.
We're also going out to our members and going to seek another round of fundraising so that we can have the money to do some research, as we were told that that would be the best way to do it. That there wasn't really any research available through the national organic program currently.

And then we will commit to you to come back and let you know what studies we are going to fund and what research we're going to do as we do it. As close to live as possible.

And lastly, we just want to support that there is -- we've heard there's going to be a formation of a working group through the National Organics Standards Board on methionine. We obviously support that.

We are happy to support it with any sort of needs you from us, as far as it be support, experts, farmers, access to farms, access to anywhere in the United States. And the best part is, I have no life so I can talk for as long as I want.

CHAIR RICHARDSON: Actually, I was
just about to interrupt you. Because I have noticed that --

MR. WILL: But I actually think that I will drop to conclusion right now. Thank you very much.

CHAIR RICHARDSON: I did notice that you know. And I know that Tracy has a question.

VICE CHAIR FAVRE: Yes. Thanks, David for taking us seriously when we say it's absolutely imperative that you develop some alternatives. So it's good to hear about the actions taken to work on that.

Can you give us an idea about how long it would actually take to bring something to market once you identify an alternative?

MR. WILL: Well I think one thing I've said in the past, Tracy, is I think our first goal is going to be to try to come up with something that's available that's not a synthetic and get that going. Something in the natural or non-off that list and try to come with that.

Again, without having an identified,
I'd be taking a total shot in the dark. I know there's been studies done and looked at.

And, you know, I know potato starch has been worked on. And corn gluten, which you know is not very commercially available. And they both have not fared well.

I think that's why you see EU has moved so far into the free range now of a product, versus organic egg. And I think you'd have the same impact here.

CHAIR RICHARDSON: I have Ashley and then Mac.

MEMBER SWAFFAR: I have two questions. First, can you kind of tell us a little bit why the FDA would be concerned with adding insects to poultry feed?

MR. WILL: Well, one of the concerns is it's not necessary in the adding it, it's what you're going to add. One of the major insects that you can find on a poultry farm potentially could carry salmonella with it. In just the insect and its manure.
And also just the bio-security point of it. Depending on how we did it. You know, if we're talking about ground worm in the meal versus maybe a frozen or a freeze dried product.

So I think we first have to identify what our options are. And then what, they have to do some sort of risk assessment.

But we're all required to monitor flies in our chicken house. How many times a little bug lands on an index card. And if it gets above a certain number then we're identified as having a fly problem. So insects to them is a very dirty word.

MEMBER SWAFFAR: And my next question is, can you address the previous comment or statement that methionine is the growth promoter?

MR. WILL: Well I think it's an essential amino acid. And I don't know any amino acids that are essential in the world that don't promote the growth of the species that they're designed and given to.

There is absolutely reason to try to
grow a chicken to lay eggs faster. The whole point of this is to grow a frame and a foundation. That's why it takes us six months before we get a single egg out. That is the whole point and the purpose of it.

So if you take something away that's essential, obviously you're going to have retarded growth and development.

CHAIR RICHARDSON: Mac? Calvin?

MEMBER WALKER: Thanks, Dave. I was also glad to hear you're in support of the organic poultry working group.

The livestock committee did put that forward to NOP. So I think we are waiting to get a resolution on that when we go through a, I think it was two years.

And the group of Mac Stone, Ashley, Tracy and I. And we put forward individuals, such as yourself, who are large operators and also small operators.

And we are hoping that we can get that done. Because at the last meeting the resolution
was passed 15-0 in support of this particular issue. Of moving the organic poultry industry alone.

And we don't want to come back in five years. I'll be off the Board for sure. But we don't want this issue to continue to fester.

I think that this organic poultry working group would be a path to help us. And I was glad that you said that you all support that.

MR. WILL: And I appreciate your support as well, sir.

CHAIR RICHARDSON: Thank you, Calvin. Great, I think that's it for questions. Thanks very much.

MR. WILL: Thank you very much.

CHAIR RICHARDSON: We'll move to the next speaker, David Marchant. And the next one after that is Mike Baird. Bald.

MR. WILL: Please John Ashby next year. Please. Thank you.

MR. MARCHANT: Hello. My name is David Marchant. I'm a local grower here of fruits
and vegetables. I've been farming certified organic for 25 years. And I'd like to thank you for having the opportunity to speak.

I presently serve on the board of NOFA Vermont and I'm president of the Deep Root Organic Truck Farmers Association. Which is one of the few international cooperatives in the country. With members in Canada and here.

I would like to address two issues. The first being the allowance of use of bio-based mulch films.

Mulch films are rather important in production in fruits and vegetables. And there has been talk of allowing the use of, we are allowed use for one year. And then there was concern about the components.

But I'd like to encourage you to think about what the use of plastics and the environmental impact of that is in terms of disposal and what not.

I understand that we allow -- NOSB suggested the allowance of it. But there was
concern about how much plant material was actually in those films.

I would encourage you to perhaps setup a system where we would encourage manufacturers to try to increase that. Similar to organic seed production.

If we had required everyone 100 percent organic seed production when we first started, there wouldn't be too many of us around right now. We've allowed that to increase. And I would suggest that as an option potentially.

Mulch films are definitely an important part of fruit and vegetable production. Especially in the North.

The other point I would like to address is the hydroponic question. And the thing, the important thing I think to think about, is equivalency. We're no longer just in a single market.

The original organic law talked about making everything a level playing field. And that was mainly concerned looking at states.
Now it's a much different world. We compete against Mexico, we compete against Canada all the time. To think that we have such a difference in what's allowed as being labeled organic is a major concern.

And that also holds to the bio-based mulches. Our neighbors just to the north are allowed to use them, we are not. Whereas, you know, hydroponics is not considered organic there.

So I would encourage you to really think about the equivalency thing. So that's it. Thank you.

CHAIR RICHARDSON: Great. Thank you very much, Dave. Are there questions for Dave? No, okay.

MR. MARCHANT: Okay.

CHAIR RICHARDSON: Thank you. Appreciate you coming very much. Mike Bald next. And then Anne Lazor.

MR. BALD: My name is Michael Bald. I live in Royalton, Vermont. Thank you for your work.
And welcome to Vermont. Welcome to all of you who have traveled far. I appreciate the time to speak.

I've learned a lot from the comments here and from the comments, and from the questions. My goal today is to return that favor and to empower you by sharing a concern that I have from my experience on the land. It will illustrate why your work is so vital, in my mind.

I'll save a thousand words and put up a picture. This is me and this is what I do. The word there, the wording is, stewardship equals presence.

I honor the saying, the old saying, the footsteps of the farmer are the best fertilizer. And I take it a step further, managing invasive species with a notion that the footsteps of the farmer are also the best herbicide. Stewardship equals presence. We need to be present on the land.

That's myself there. I know that's kind of a sketchy looking character on the side of
the road, but I'm protecting a hay field behind from wild parsnip that you see in the foreground.

I would like at the time to give a big shout out to the town of Stowe, where we are now. And joining other towns, like East Montpelier, Woodstock, Windsor, Orford, New Hampshire, Randolf, Vermont. All of these towns have hired me or worked with me to do nonchemical non-synthetic, non-toxic invasive species management on their town forest or lands.

I'm working right down the road here. It's happy coincidence that I'm here this week. If you'd like to do a field trip, if you don't want to go to high mowing seeds, come on out and see about pulling Japanese barberry. Good fun.

So to my point. I looked at your mission online and your key activities. I think we have some overlaps. We both engage and support the world of organic. You seek degrees of standardization and consistency as well.

You heard about Vermont's amazing organic farming community. I'm a NOFA member.
It's a brilliant, wonderful thing to be part of.

But I want to share with you now that
is insanely difficult to be an organically minded
landowner in Vermont. Working the land in any
manner, a Christmas tree farm, that's a Christmas
tree farm underneath all the wild parsnip believe
it or not, that's a private farmer.

All of these farmers, and landowners in
general, whenever they try to get -- whenever they
seek invasive species management support, they are
told through USDA, NRCS that they have to use
chemical treatment programs only. There is no
funding for any other method.

New Hampshire, Massachusetts, do
whatever you want. Just get the job done. But not
in Vermont.

So what is the impact of this? I'll
just briefly summarize and then happy to answer
your questions.

A chemical, exclusive chemical
treatment program throws organic farming, or
organic landowners in general, under the bus.
They have to pay out of their own pockets to manage weeds.

Integrated pest management is an empty shell. It exists in name only when only one method is funded. Chemical treatment.

And finally, there is no commitment to long-term stewardship of the land when only one tool is used.

So I hope I've empowered you. I know you interact with USDA colleagues. You are decision makers. I've given you my take from the field. I hope I have empowered you. Thank you.

CHAIR RICHARDSON: Thank you, Mike, for your clear presentation. Questions, comments from the Board? Nope. You were very clear and much appreciated.

MR. BALD: Thank you.

CHAIR RICHARDSON: Thank you very much for coming to the meeting. The next speaker is Anne Lazor. And she'd be followed by her husband Jack Lazor.

MS. LAZOR: Hi, my name is Anne Lazor.
I live in Westfield, Vermont. We have an organic dairy farm that we've been in business for 30 years, at least, here. And we've been certified organic since the late '80's.

I'm also on the Vermont organic farmers review committee. So that gives me another perspective.

Originally we were certified in the '80's as some of the original dairy farmers that created the standards. And so it gave us a perspective on what it takes to farm organically on a dairy farm. Because there wasn't anything at the time when we started doing this.

So when the OFPA was passed, thanks to our respected Vermont Senator Leahy, we had concerns that given overcontrol of the organic standards to the USDA would undermined the original essence of organic farming. Small scale farms caring for the earth and building up the soils with organic matter and rock fertilizers to grow high quality food without synthetic chemicals and pesticides.
The NOSB was designed to maintain these values. Made up of farmers, scientists, university researchers, well respected for their experience. And in experience in organic production.

We're hoping that in the future that the organic standard -- the NOSB will continue to be populated by people experienced in organic production and research and farming. And that we have enough farmers and people understanding farming to continue to have a good influence on this Organic Standards Board.

But more to the point, I am concerned that our Organic Standards Board is not being heard by the NOP and the USDA. And that the advice that this Board gives to the USDA is not being addressed and not heated by the USDA.

And that perhaps the infiltration of agribusiness, which we're well aware of that agribusiness is in part and part with the USDA in a lot of the positions, that it has an effect on the ability of the USDA to utilize the advice of
the NOSB.

So what I'd like to say is that the NOP needs to respect the depth of knowledge and experience of the NOSB members and implement their decisions, not hampering their effectiveness by changing the rules. Such as the redesign of sunset polices and other organizational polices.

The creation of corporate agribusiness is directly related to producing cheap food. We need to change our outlook that good food costs less.

We need to focus on the care of the earth. If we support the building carb -- support building carbon and organic matter in our soils, as well as nurturing the soil biology form earthworms to mycorrhizae.

If we keep our vision of healing and enhancing the natural systems, we will in turn feed us and future generations.


Jack, you're up. The next speaker
after Jack Lazor will be Kelly Tavaras.

MR. LAZOR: Thank you for giving me this opportunity to stand up here and talk to this great body. It's guiding organic agriculture in our nation.

I'm probably one of the originals. Probably, you know, the second oldest organic, certified organic dairy farm in the country. And as Anne said, you know, when we started there were no standards and we flew by the seat of our pants.

But from the very, very beginning organic to us was always about promoting life, caring for the earth, caring for the soil and putting that above all else.

And in the very beginning, our meetings here in Vermont were really well attended because we wrote our own standards that were done for our region and we hashed it out. And it wasn't always easy, but we all felt good about it.

And a lot has changed since, you know, 1990 and 2000 or 2001 when, you know, this became institutionalized through the USDA.
So I'm just here to remind you folks that what the true meaning of organic is, and it's, you know, it is certainly a lot of, you know, it's sort of become a, more about process and less about spirit.

And I would like to remind you to sort of keep up the spirit of making this earth a better place. Of taking carbon out of the sky and putting it in the earth as organic matter. And humus. And help us do that.

And, you know, so remember when the hydroponics that, you know, it's all about soil and mycorrhizae and bugs and microbes and all the good stuff down there. And, you know, we get lost in the little details about methionine and celery powder and all that stuff.

And the one thing that has really, really bothered me that you folks did, and it's about ten years ago, is that you took cement kiln dust off the list. Because apparently somebody burned some tires in a cement kiln and that was a bad thing.
But what cement kiln dust does for me, as an organic dairy farmer, is it allows me to grow the very, very best nutritious high calcium, low potassium feeds that I can use. And so it's okay here in Vermont.

Everybody likes to spread wood ash. And, you know, wood ashes also makes hydroxides and highly alkaline materials that, you know, maybe have a slightly bad influence on the soil, but you can spread all the wood ash you want. You can burn a tree and you can spread it on the land, but you can't burn a rock and spread that on the land.

So I ask my certification board, well can I just get a bunch of lime and make a pile of wood and burn the lime myself and spread my own lime so it doesn't have to come from cement kiln dust place, and I can't do that either.

So I want to grow the very best feed I can, and I feel like we get a little bit bound up in being controlled by the federal government.

So thank you for whatever you do. And remember it's all about life. Thank you.
CHAIR RICHARDSON: Thank you, Jack. There's a question here from Calvin.

MEMBER WALKER: Always like to see the old guard of the old land. And I said it --

MR. LAZOR: Pardon me?

MEMBER WALKER: I always like to see the old guard of the old land. It gives me a lot of respect.

And my question to you is, where do you see organic, considering the challenges we have, in the next ten years?

MR. LAZOR: Well, I would like to see organics grow. And I do have to say that bringing you large scale business into organics with national distribution has allowed more families and people to think about, you know, it's a growing industry.

I do believe that human greed and the power of money kind of constricts us. And sort of being able to balance, you know, the true meaning of organic with getting the product to market, keeping people in business and giving good food to
people is a challenge.

And I'm sure you folks are doing your very, very best. And it can't be easy. Because you're basically controlled by an organization. The agricultural marketing service that is not really on our side.

I mean we need -- the only way we're really going to improve and save the earth and prevent climate change is by taking carbon out of the sky and putting it into the earth. And organic farming has the power to do that.

And do everything in your power to keep it happening. And, you know, keep it moving forward.

CHAIR RICHARDSON: Thank you for your comments, Jack. And I just wanted to assure you, you know me, I don't let people tell me what to do. And I think all these members around the Board, that you see, are good strong minded people that will listen to what you say and be able to use it. So thanks very much for your comment.

MR. LAZOR: Thank you.
The next speaker is Kelly Tavaras. And our final speaker of the morning will be Marty Mesh, right after Kelly.

MS. TAVARAS: Hi. Good afternoon. My name is Kelly Tavaras and I serve as the digital communications manager for the Organic Trade Association.

On behalf of OTA I'd like to thank outgoing board members. Mac Stone, Calvin Walker, Colehour Bondera and Jessica Taylor for your outstanding service.

My colleagues have already spoken on specific agenda topics and you have our extensive written comments. So my remarks will focus on OTA's membership, our NOSB comment process and sunset material review.

To begin I'd like to congratulate NOSB and the national organic program on successfully offering virtual opportunities for public comments. Increasing accessibility to this process is a big step forward.

OTA members represent the huge
diversity in the entire supply chain of today's organic industry. Small and large organic farmers of all types, local and national organic processors, regional and countrywide organic distributors, retailers and so on.

We represent over 8,500 businesses in all 50 states. And half of OTA members are small businesses reporting less than a million dollars in organic sales annually.

OTA's members are represented either through direct membership or through strategic partnerships with regional organic producer organizations across the U.S. through our farmer's advisory council.

If you visit ota.com you'll see clearly stated information on how to become a member, what the benefits of membership are. And even more importantly, how we engage members in our advocacy work.

OTA members are proud to be part of the association. And the OTA member list is, and always has been, open to the public.
Our membership is governed by a democratically elected board of directors ensuring that we're accurately representing our stakeholders.

The comments that OTA submitted to NOSB are on behalf of that membership. In order to do this, our regulatory staff carries out an extensive engagement process with the membership so that we can understand exactly how NOSB recommendations will impact certified farmers and handlers on a day to day basis.

To help facilitate a thorough comment and review process for 2016 and '17 sunset materials, OTA created an electronic survey for each individual input under review. The surveys are confidential, user friendly, available to every NOP certificate holder.

And includes seven to ten questions addressing the necessity or essentiality of the national list input that's under review.

You have our written comments, which include all the survey responses we received to
date. We are proud to have collected a total of 470 unique responses from organic businesses across the country.

My question to the Board is this. How can we improve our survey system to help you? How can we help NOSB?

For example, is there a better way for us to report the data to you?

Our goal is to ensure engagement for membership in our process and to effectively deliver that feedback to NOSB for your consideration. So please let us know how we can help. Thank you so much.

CHAIR RICHARDSON: Thank you. Questions? Questions from the Board? No questions.

MS. TAVARAS: Thank you.

CHAIR RICHARDSON: Well and of course we've all read the extensive written materials that have been submitted by OTA, prior to the meeting.

MS. TAVARAS: Excellent. Thank you.

CHAIR RICHARDSON: Thank you. Final
speaker of this morning is Marty Mesh. And, Marty, you still get the same three minutes that everybody else does.

MR. MESH: Marty Mesh. Florida Organic Growers and Quality Certification Services. Again, it was kind of just said that thanks to Colehour or Nick, Jennifer, Calvin and Mac for all the tremendous work.

I want to appreciate the NOP staff for all the work and effort. I know Michael likes to stress about misstatements of facts and trying to really going after good organic community people from doing public service. So my hats off to the NOP staff.

QCS will be more vigilant about submitting comments in the future. Written comments.

As Jake was accurate in his challenges about trying to get folks to weigh in about the overall few materials and tools in an organic farmer's toolbox. But here's a few comments from our staff.
Chlorine, we support it. More fun stuff for me to talk about. Humic acids, QCS supports retaining alkali extracted humic acids on 205.601(j).

They're widely used by QCS certified organic producers due to a variety of benefits. Including improve soil structure, increase nutrient availability, increase root and top growth and increased yield.

The demand for an extensive use of alkali extracted products in organic production can be evident by the 80 plus crop production materials registered with OMRI. With OMRI containing alkali extracted humic acids.

Microcrystalline cheesewax we support. We support it. The staff raised questions about the concept of soy wax products, because there aren't any listed.

Furthermore, soy wax was viewed by QCS. Contains hydrogenated soybean oil, which QCS determined to be synthetic.

Thus we believe the soy wax would need
to be, first petitioned and added to the national list before it can serve as a real alternative to cheesewax.

Micronutrients. The proposed annotation, we strongly support the annotation change from micronutrients listed on 205.601(j)(6) from soil deficiency. Must be documented by testing, to deficiency must be documented.

This is a sound and sensible approach for organic producers to address micronutrient deficiencies that may be identified in ways not confined to soil testing.

Additionally, this annotation change should also apply to 205.601(j)(5) magnesium sulfate. As the current annotation states, "allowed with the documented soil deficiency."

Alginic acid. We believe that this should be reclassified as synthetic instead of non-synthetic. The reason is that the extraction process used to make this material involves a chemical process utilizing an alkali treatment and acid precipitation.
Carnauba wax. There's five current suppliers that this material, hazardous material, as organic, according NOP's list of certified operations. Given that information, it should remain or be on 205.606.

And then we had some entities talk about gellan gum that should remain on the list.

So in my limited time I want to talk about GMOs and big picture stuff and all that kind of stuff.

CHAIR RICHARDSON: So that was three minutes, Marty. Are there questions for Marty?

Yes, Jennifer?

MEMBER TAYLOR: Thank you so much, Marty, for your presentation. Could you please give us some more of your time and complete your presentation.

PARTICIPANT: That was about GMO.

MR. MESH: I could, is that a question?

MEMBER TAYLOR: Appreciate it. About GMOs. Thank you.

MR. MESH: I'd be happy to answer your
question. Really quick though.

I find it incredibly insulting to put the, and I've always talked about the patent holder should be responsible. I think it's incredibly rude to put it all on the organic farmers trying to void technology. That if it was chemical trespass, that the prevailer of that would be responsible.

That it should be the patent holder in this case that's responsible for protecting organic seed suppliers, organic farmers from genetic trespass. And they should control their own technology, not put it on an organic farmer to prevent. So with that, let's go eat.

CHAIR RICHARDSON: Yes, indeed. Okay, so at -- well we will reconvene here at 2:00 p.m. this afternoon. At 2:00 p.m.

And just a reminder that we will be having the NOFA reception tonight. That will start at 6 o'clock, in case you're headed out up the Hill for lunchtime. Just so you know.

(Whereupon, the above-entitled matter
went off the record at 12:51 p.m. and resumed at 2:08 p.m.)

CHAIR RICHARDSON: All right, everybody, we are actually going to start the afternoon session as close to on time as we can get, given our excellent public comment that we had this morning, which meant that we did run over. But I know obviously we don't have all the public back yet.

But I just want to say, as I'll say at the end of the meeting, it's been absolutely fabulous to have so many Vermont producers come to the meeting. I'm just really very proud of my state for having such a good turnout of great guys and gals.

Before we get into the nitty gritty of the Sunset, just a reminder from Tom Stearns, of High Mowing Organic Seeds. This is an open invitation to people for tomorrow to do a field trip for tomorrow, Wednesday from 3:00 p.m. to 5:00 p.m. or Thursday from 9:00 a.m. to 11:00 a.m.

This is not at the time when the Crops
Subcommittee is meeting, it's at the other time. So, Tom would be excited and happy to show you around the facilities, and explain how they do the organic seeds. And Tom is back there somewhere. Where are you Tom? Tom is there, red shirt on.

So if anyone wants to go on that, except NOSB member, you're not allowed to. Or, and you can RSVP him, Tom, at highmowingseeds.com. So I hope that's a nice gift that you have, Tom. And I wish we could have had one for everybody at the beginning of the meetings. But so much work we have to do, unfortunately.

So just a few words before we get into the crops Sunset, just to get us going. First of all, on conflicts of interest, let the record reflect that all members had circulated to them, as we have in our policy and procedure manual, the conflict of interest table. For us a sort of table that we send around that has every one of the materials listed on it.

And each member is required to report back to Michelle on that sheet whether or not they
have a conflict of interest. No member reported any conflict of interest for any material, per se.

But Zea would like to make a brief comment about conflict of interest. And also make a brief introduction, since she wasn't here on the first morning, because of the plane problem. Zea.

MEMBER SONNABEND: Thank you. And after, as many of you know, I like to personally disclose my conflict of interest or lack thereof. If any other Board Member wishes to do so after I do it, before we start into this voting portion, now would be the time to do it. So I'm combining introduction and conflict of interest declaration.

My name is Zea Sonnabend. I'm a small farmer from Watsonville, California, with 18 acres of diversified fruit and an acre of vegetables for seed. I hold the scientist seat on the Board because of my long career in evaluating organic material.

I work part time for CCOF, a non-profit organization with 1,400 small farmers of which 1,000 are very small. One thousand processors,
some of which are also farms. And 600 medium or large farms.

All of the Sunset materials may or may not be used by some of these CCOF clients. And many of the crop input for this meeting are used by me on my own farm.

I'm a very small voice without a big media machine behind me. I'm also a small farmer doing what I think is right for most farmers, large and small, in my work with NOSB.

I have spent my entire career in the non-profit sector, other than my farming endeavors, which are arguably non-profit at this point. I do try to do my best in evaluating materials and fighting GMOs with my time, instead of fighting with the USDA over Sunset. And I put in way more time than I'm paid towards these efforts.

So now, a small amount of my overall voting record is being labeled as part of the corporate voting bloc, ignoring the many other votes that removed substance from the list, or
failed to add new petitioned item.

And I ask, how would you all feel if select things you say or do at meetings are picked apart, distorted, and sponged to look negative, and then broadcast over the internet?

Yet, the people doing this have called for respect, whether any of agree with their positions on any particular issue. Isn't this hypocritical? I do not respect this approach, or feel respect. I'm an independent thinker and voter, and not part of a corporate voting bloc. Thank you.

CHAIR RICHARDSON: Thank you, Zea. In regards to materials that we will be listening to this afternoon, and throughout the rest of this meeting, all of these Sunset materials come to this meeting to the full Board of the NOSB on a seconded motion to remove.

The subcommittee cannot make decisions, as all of you know, and as you commented in your written comments. This vote was intended simply to indicate the possibility of removing, and
to ensure that we did get adequate comment from the public. And we can see how effective that was when it came, for example, to the ethylene.

Only the full Board can make a decisive vote. And that's why we are here at this meeting, to conclude our Sunset review on all of these materials. None of the Sunset materials will be tabled at this meeting. But any NOSB member can request the need for more information, perhaps another TR, or a new TR, or perhaps an annotation.

And any NOSB member will be able to request through their subcommittee chair, to the executive committee, that this material be added back to the work agenda for the subcommittees to review further in the spring, immediately following this meeting and our next session, you know, semester. So that hopefully we could bring back, if necessary, further changes and annotations, et cetera, to the April meeting.

And I hope you will follow that as closely as you can do, as we go through our subcommittee deliberation. In terms of procedure
for presenting the Sunset material, Dr. Brines will read each material into the record.

We are basically not going to group these, just in case there's any member that, you know, that has some additional comments they want to make. And it's different from the vote because it came up from subcommittee. They'll read each material into the record, and the lead person will present.

I am strongly urging, urging, urging each person, please, lead persons, do not just read out all the material we've just sent out for public comment. Otherwise we'll be here until next Tuesday. Please be brief, and bring in only those additional types of materials that we need in order to make our decisions today.

So, the lead person will present. There will then be a discussion and a vote. Voting. Voting will be slightly different to the way we've done it in the last few meetings.

Again, in an effort not to take a huge amount of time by going one, two, three, four, five,
or around in a roll call, we will do it based on a show of hands. And the hands will be kept up for long enough to be counted. And except that any NOSB person, if they wish, can request for roll call.

We discussed the, NOSB members have discussed this amongst themselves as being the most efficient way to conduct the votes during this next few days. I know in the past they've grouped materials together for Sunset. But we're trying to be more open and transparent on this for every material, as you can tell.

Several members have been given voting tally sheets. In fact, any member that wants to have a voting tally sheet, as you know Michelle has a whole stack of them. Michelle has them as well.

Each of these voting tally sheets will allow several members to keep track of all of the votes of all of the persons on the NOSB. And we will, all of those voting tally sheets will also be reviewed at the end of the meeting by Michelle, in order to make sure that there are no errors.
Tracy, as the Vice Chair, will announce the votes, as opposed to the Secretary, who is kind of long way away. And so, she will announce the votes as they come up. Votes, as you know, will be as required, specified in OFPA.

Two-thirds of the votes cast at a meeting of the Board are needed in order for the review to be completed from our perspective. All abstentions will be recorded as such, and not included in part of the total.

Similarly, any Board Member who recuses themselves due to a conflict of interest, which we have not seen, or are absent, which we don't have, they shall be recorded as such. And their votes will not be counted into the total number.

So, I know that Tracy and, or most every Board Member has a copy of the vote tally sheet. Yes. And as you all know, there's only 14 Board Members coming up with the decisive vote numbers.

Are there any questions from the NOSB Board? Yes, Nick.

MEMBER MARAVELL: Yes. I have two
questions, and one sort of conflict of interest
ting to bring up. I have been working with NBC
National News to get the database of the USDA
certified operations out to the public.

And I've been informed today that
they're making a piece available to their
affiliates nationwide, stating that USDA has
released a list of certified operations in the
United States. And they spent a few minutes on my
farm. So I may also be on that as well.

But I wanted to make it clear that I did
not receive anything from the NOP, or any of its
employees. And I did that totally of my own
initiative.

Now, getting to our voting procedures.
The, I guess I've got a couple of questions here,
Jean, just for clarification. I think I
understood exactly what you said. But I want to
repeat this, that the subcommittees have made a
motion on all of the Sunset proposals.

They have also, you know, they made a
motion, they seconded it, and they voted. That's
the only way that those proposals can come to us, the full Board? Is that what I'm hearing? That there's no other way that the full Board could have received those Sunset proposals?

CHAIR RICHARDSON: That is the way that we've traditionally moved things from a subcommittee to the full Board.

MEMBER MARAVELL: Right.

CHAIR RICHARDSON: However, as you well know, in OFPA we're not required to vote on Sunset materials at all. So voting is just what we've traditionally done. So we're doing what we traditionally do.

MEMBER MARAVELL: Right. But we could not have, we would not be doing this had the subcommittees made a motion and voted on it, and sent it to us now? That's correct? Right. Okay. And then, just to clarify the number of votes. We're voting on de-listing motions, that's motions to remove things from the list, correct?

CHAIR RICHARDSON: That is what I said, yes.
MEMBER MARAVELL: Okay. So then, if there were, in this case we have 14 members present, or 14 members voting. Then if there are nine votes that were to say, yes, de-list, those would be yes votes that would say de-list. And there would be five votes that say, no, do not de-list, then that remains on the list, correct? Am I correct there?

CHAIR RICHARDSON: Yes. I believe you should have received as part of your package a sheet that looks like this, Nick, which actually gives you the breakdown, so that you could look at each of them in turn. It lists for the votes cast, refusals, abstentions, to how do you come up with a two-thirds majority. Do you have that list?

MEMBER MARAVELL: I've had it in the past. I don't have it in front of me right now. But I'm just sort of saying, I just made up that example. But I'm assuming that what I just said was correct.

If there are nine votes that say in the affirmative to de-list a Sunset provision, and there are five votes in the negative, not to
de-list. Then would that indeed constitute a case
where the --

CHAIR RICHARDSON: It would depend if
there were recusals or abstentions. Again, I
would refer you to the list, so that --

MEMBER MARAVELL: No. I'm saying if
you've got nine affirmatives --

CHAIR RICHARDSON: Two-thirds is a
majority.

MEMBER MARAVELL: -- and five
negatives, then the proposal would fail, in effect,
because it did not reach a two-thirds majority.

CHAIR RICHARDSON: Yes.

MEMBER MARAVELL: Is that correct?

CHAIR RICHARDSON: It, two-thirds,
whatever the two-thirds is. Because --

CHAIR RICHARDSON: Well, Michelle just
gave me --

CHAIR RICHARDSON: If 14 votes are
cast --

MEMBER MARAVELL: Right. Two-thirds
requires ten.
CHAIR RICHARDSON: -- you would -- Correct. It would require ten.

MEMBER MARAVELL: Right.

CHAIR RICHARDSON: If 13 votes were cast and there were two refusals, for example, then it would require nine.

MEMBER MARAVELL: Nine. Yes.

CHAIR RICHARDSON: And so on down the list.

MEMBER MARAVELL: So I was just giving the example of if there were 14 cast votes, nine in the affirmative, five in the negative, then a particular Sunset material would remain on the list under this procedure. I'm just trying to clarify.

CHAIR RICHARDSON: So what's the issue?

MEMBER MARAVELL: I didn't say there was. I said I was trying to clarify for my benefit.

CHAIR RICHARDSON: Yes.

MEMBER MARAVELL: Thank you.

CHAIR RICHARDSON: Okay. And if there's any questions on that I know that Dr. Brines
will correct us if we have made an error in the manner in which Tracy then says whether it's, the motion is passed or not.

And we may make some slight mistakes as we go along here. But I'm sure there will be Board Members that will correct us as we do the voting and the vote counting. But try to be as flexible and helpful to each other as we can be. Are there any other questions from the Board? Colehour?

MEMBER BONDERA: I'm not sure it's a question. But I just want to again wrap my brain around this process before we get going. And I think I have it down, but just to verify. We're using the motions that were made at the subcommittee level? We're not making motions at this level? Is that correct?

CHAIR RICHARDSON: Yes.

MEMBER BONDERA: Okay.

CHAIR RICHARDSON: That is absolutely correct. We are using those motions.

MEMBER BONDERA: And also, the person who made the motion at the subcommittee level,
because I full well know they often did not, does not need to vote for the motion they made?

CHAIR RICHARDSON: That is correct.

MEMBER BONDERA: According to the paradigm --

CHAIR RICHARDSON: Robert's Rules.

MEMBER BONDERA: -- that has been used in this process?

CHAIR RICHARDSON: And also Robert's Rules of Order, both. So, any person can, you can make a motion. Anyone can make a motion. It doesn't mean that if you've made the motion you have to vote for the motion. It is simply a technique for getting a question up for debate, ready for debate by the group. So, yes, you are correct.

MEMBER BONDERA: Thank you.

CHAIR RICHARDSON: Okay. Are you ready, Zea?

MEMBER SONNABEND: Yes. But I believe, we're going to take the materials in the order that they are on the list, I believe. And so, the first thing would be to turn it over to Lisa
Dr. BRINES: Thank you. The first material on the agenda for the crops, for the, or this afternoon, is alcohols, ethanol. So for each of these substances I'll read the full listing into the record, and then turn it back to the Board for discussion.

The first listing on '205.601, synthetic substances allowed in organic crop production, under Paragraph (a) as algaecide, disinfectants, and sanitizer, including irrigation system cleaning systems, (1) alcohols (I) ethanol. Thanks.

CHAIR RICHARDSON: Okay. Then Francis, would you like to --

MEMBER THICKE: Yes, thank you. So there are two alcohols, ethanol and isopropyl ethanol alcohol. And we're going to do ethanol first. And, as was mentioned by Lisa, it's used as a disinfectant, sanitizer, and algaecide.

And in the two rounds of comments that we had there were lots of support for re-listing
it. And it's, there is the possibility of having a natural fermented ethanol. And one commenter asked that we should have looked down, looked to see if there is sufficient natural ethanol available.

The TR did not have that information. We don't have that information. So that is lacking. But the comments were overwhelmingly in favor of re-listing.

CHAIR RICHARDSON: Is there any discussion on the motion? Is there any discussion on the motion? Seeing no discussion on the motion, I would ask for a show of hands. If you wish to remove alcohols ethanol from the National List, please raise your hand. I see no hands raised.

Please raise your hand if you vote no, that is, to keep the ethanol on the list. Yes, Harold, we can see you. Okay. Thank you. Are there any, I did not see any. But are there any abstentions or recusals? I see none. Tracy, do you want to read the results?

VICE CHAIR FAVRE: Zero yes, 14 no.
The motion fails.

CHAIR RICHARDSON: Thank you. Next material.

MEMBER SONNABEND: Lisa will talk.

DR. BRINES: Okay.

MEMBER SONNABEND: Calvin is missing.

CHAIR RICHARDSON: Oh, thank you. Oh, okay. One absent. There you go.

MEMBER THICKE: We're going to have to talk to those absences about raising their hand.

CHAIR RICHARDSON: Yes, that's true. Sorry about that, folks,

MEMBER SONNABEND: It's great.

VICE CHAIR FAVRE: So the vote was zero yes, 13 no, one absent.

CHAIR RICHARDSON: Mac.

MEMBER STONE: Just for the record, Madame Chair, by me holding up one finger, that's saying ma'am when I hold my hand.

CHAIR RICHARDSON: The Chair notes the subtlety. Next material, Lisa.

DR. BRINES: Yes. Moving on, next on
the agenda is isopropanol, also listed under '205.601(a) as algaecide, disinfectants, and sanitizer, including irrigation system cleaning system, (1) alcohol, (ii) isopropanol. Thank you.

MEMBER THICKE: Okay. And as with ethanol there was widespread support for renewing this material on the list. We'll keep it simple. Zea.

CHAIR RICHARDSON: Zea, do you want to be the one that says, any discussion? Or what do you want to do?

MEMBER SONNABEND: Is there any discussion?

CHAIR RICHARDSON: Seeing no discussion I believe we are ready to vote. All those in favor of removing alcohols isopropanol from the National List, please raise your hand.

All those in favor of, all those opposed to the motion, please raise your hand. Are there any abstentions or recusals? I see not. Tracy, do you have the vote?

VICE CHAIR FAVRE: One yes, 13 no. The
motion fails.

CHAIR RICHARDSON: Next would be chlorine materials. Lisa.

DR. BRINES: Do you want to take these three as a group, Zea?

MEMBER SONNABEND: Yes.

DR. BRINES: Okay. Thank you. So next up is under '205.601 of the National List, under Paragraph (a), as read before, (a)(2) chlorine materials for pre-harvest use, residual chlorine levels in water, in direct -- I'm sorry, I'm looking at a different section here.

For pre-harvest use, residual chlorine levels in water in direct crop contact, or as water from cleaning irrigation systems applied to soil must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act, except that chlorine products may be used in edible sprout production according to the EPA label directions.

We're taking the three materials as a group, calcium hypochlorite, chlorine dioxide, and sodium hypochlorite. Thanks.
MEMBER THICKE: Okay. So again, there was a lot of support for renewing these materials. But there was also a lot of concern about chlorine in general, not only for crops, but for livestock and for handling.

And suggestions were made that we need to do more homework on chlorine. And based upon those comments, it seems to be that would be good for us to look to the future, maybe amongst all three committees, to do some kind of a targeted technical review, whereby we could look at what are all the uses for chlorine, and what are really needed. And kind of get that all tallied up.

Especially like, for example, in dairy. Maybe a thing from dairy. It's in the pasteurized milk ordinance. Most of the states adopt that. States change things.

And so, it would be good to have a listing of what is really needed, and what alternative could be available. So I'm just throwing that out in this time, just for something for our committees to look at in the future.
MEMBER SONNABEND: I just wanted to point out that we have put this on our research priorities agenda. So that research that focuses on organic uses of chlorine can be done over the years as we take another look at this.

CHAIR RICHARDSON: Anymore discussion? Colehour?

MEMBER BONDERA: Yes. And I think what Francis said, that is going to reiterate the word alternative. I think it's critical in that whole discussion. And that's my personal take on this topic. Thank you.

CHAIR RICHARDSON: All those in favor of removing this group of chlorine materials from the National List, please raise their hand. Those opposed to remove these materials from the National List, please raise your hand. Thank you. Tracy. Or, sorry, any abstentions, any recusals? I didn't -- Show all hands.

VICE CHAIR FAVRE: Okay. The vote was two yes, 12 no. The motion fails.

MEMBER SONNABEND: Next is hydrogen
peroxide. So, Lisa.

DR. BRINES: Thank you. There are two listings for hydrogen peroxide that were considered by the subcommittee as a single motion. The first listing is at '205.601(a), as algaecide, disinfectant, and sanitizer, including irrigation system cleaning systems. And also under '205.602(I) as plant disease control. Thank you.

MEMBER SONNABEND: This one was my material to work on. We did commission a new TR, because the TR that had been existing on this was old. And we found out some good information in relation to the criteria that we used for review material.

We have, the good parts of it is that is has very little residual effect. And relatively no impact on birds, humans, or fish, as long as it's used according to label direction.

We, in public comment we got general support for re-listing. And a few people pointed out that it is quite toxic on contact, and should be used carefully. But that was the primary
concern about it. And most people supported it being re-listed. Any discussion?

CHAIR RICHARDSON: Seeing no discussion, all those in favor of removing hydrogen peroxide, please raise your hand. All those opposed to removing hydrogen peroxide, please raise your hand.

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER SONNABEND: Next would be soap based algaecides and demossers. Lisa.

DR. BRINES: Soap based algaecide/demossers are listed at '205.601 of the National List under (a), as algaecide disinfectants and sanitizer, including irrigation system cleaning systems, under number 7. Thank you.

MEMBER SONNABEND: I think this was --

MEMBER THICKE: Me.

MEMBER SONNABEND: -- Francis.

MEMBER THICKE: Yes. This is one that the committee actually voted five to zero to on
de-list. And the first time around we asked questions of people who were widely using it. We didn't get a lot of response.

And the second round of comments a few people checked yes, they wanted to keep it on. But nobody really gave a reason why. It often was combined with other checks on other lists. And so, that's where it's at now. It's been proposed to be removed by the subcommittee.

MEMBER SONNABEND: Didn't we get a few specific comments in this time?

MEMBER THICKE: We got, there was one comment that soap did not affect the human health. They're composed of molecules, natural, a comment to the national environment. Well, there were a few comments, yes. Do you remember some other ones that I'm not thinking of?

MEMBER SONNABEND: Well, I remember one specific comment that was in favor of keeping it. Actually I remember two specific comments in favor of keeping it.

One was, a farmer who said that they
used it in, I guess they must live in a very moist area. But they used it, but away from waterways, and were very careful with it.

And the other one was for irrigation system cleaning in, because there's lots of different kinds of bacteria and organisms that get in the irrigation lines. And this one is better than some of the other choices for certain species of the bacteria.

Unfortunately, I didn't put my finger on exactly whose comment that was. But it was quite a specific comment to this product.

MEMBER THICKE: Correct. And there are several sanitizers for irrigation systems. But he's saying that this was helpful for some species. Yes.

MEMBER SONNABEND: Does anyone else have discussion points? So, we'll just say that I found those two comments compelling enough that I'm going to change my vote out of committee to keep it on. Because there was no negative information about health effects, or environmental effects, or
like that.

    MEMBER THICKE: Well, there was --
    MEMBER SONNABEND: And, does Harold have his hand up?
    MEMBER THICKE: Oh, I'm sorry.
    DR. BRINES: Yes.
    MEMBER SONNABEND: Okay.
    MEMBER AUSTIN: Yes. Zea, Harold. Likewise I saw a couple of those comments as well. And I felt compelled enough with reading them that I also am going to change my vote from the committee vote, and vote in favor of keeping this on the list.
    MEMBER THICKE: In the TR it does talk about the toxicity of particular water organisms. And especially if you're using it for irrigation cleaning, there's a good likelihood that it's going to get to the water.
    MEMBER SONNABEND: Anymore discussion?
    CHAIR RICHARDSON: Assuming we're ready for a vote, all those persons that wish to remove the soap based algaecide demossers from the
National List, please raise your hand. All those who wish to vote --

What are we doing, voting yes? Oppose the motion, please raise your hand. Is there any desire to do a roll call on this? We're okay.

(Off microphone comments)

CHAIR RICHARDSON: Okay, just -- Jennifer is calling for a roll call vote. Let's do a roll call vote on this. If we could, please, starting with Zea.

(Roll call vote)

VICE CHAIR FAVRE: Okay. We've got eight yes, five no, one abstention. The motion fails.

MEMBER SONNABEND: Okay. The next thing is herbicides, soap based. Lisa.

DR. BRINES: Thank you. We're on Paragraph 8, as herbicides, weed barriers as applicable. The substance under (1) is, herbicides soap based for use in farmstead maintenance, (roadways, ditches, right of ways, building perimeters) and ornamental crops. Thank
you.

MEMBER THICKE: I'm the soap guy here today. So, this one was not controversial like that last one. The support was much more wide, was more broad. And this being used for the herbicide it was stressed real systems.

And so, there's less likelihood of it getting into the, to contaminate for aquatic organisms. The vote in the committee was zero to take it off, and five to keep it on.

MEMBER SONNABEND: Discussion? I would just note that I'm continually troubled every time this subject comes up by the public comment we hear, which tends to be mostly from people who either want to use it directly on crops, or are using it directly on crops. And they're certifier isn't catching them.

As I thought was the case with one of the comments we received this time. And so, this annotation is only for roadways, ditches, right of ways and building perimeters. And we wish to maintain that annotation.
CHAIR RICHARDSON: Ready for the vote? If you wish to remove herbicides soap based, please raise your hand. I see no hands up. If you wish to leave this material on the list, please raise your hand.

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER SONNABEND: Next would be newspaper or other recycled paper. Lisa.

DR. BRINES: Thank you. There are two listings for newspaper or other recycled paper that are under consideration for Sunset 2017. The first is listed at '205.601(b), as herbicides, weed barriers, as applicable. (2) mulches, (I) newspapers or other recycled paper without glossy or colored ink.

The second listing is at '205.6018, as compost, feedstocks - Newspapers or other recycled papers without glossy or colored inks. Thank you.

MEMBER SONNABEND: Colehour.

MEMBER BONDERA: Okay. Thank you.

We, at the subcommittee level combined the two, and
took one vote. So that's how I'm going to proceed. There really were relatively few significant concerns raised regarding re-listing.

However, comments did come from various sources regarding the opportunities to separate colored and black inks, verifying the distinction of harm of inks, and from one from another.

And really was, I think at this point in time I'm not sure exactly what this process is, even though Jean mentioned it. But I think, from my perspective it suggests that we are due for a TR on this. And I hereby would like to request that that occur.

I don't know, like I said, that will go to the subcommittee and be considered as the process. So, I'm raising that. The public basically supported re-listing as it was. And the subcommittee did the same thing, which is fully opposed to de-listing. So that's where it was at. And that's all I have to add.

MEMBER SONNABEND: Thank you. The TR request will be referred to the crop subcommittee.
Discussion?

CHAIR RICHARDSON: There being no discussion, please raise your hand if you wish to remove this material from the National List. Seeing none, please raise your hand if you wish to leave this material on the National List. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER SONNABEND: Thank you. Next is plastic mulch and covers. Lisa.

DR. BRINES: Thank you. The next listing is at '205.605, I'm sorry, '205.601(b) as herbicides, weed barriers, as applicable. (2) Mulches. (ii) Plastic mulch and covers (petroleum-based other than polyvinyl chloride (PVC)).

And just for the record, there was one error in the subcommittee information. The listing citation at the subcommittee vote is indicated as (j), but is correct in the reference material as (b). Thank you.
MEMBER SONNABEND: Colehour.

MEMBER BONDERA: Thank you. Yes.

This is perhaps one of the more complicated ones for me at least. So it will take a few extra moments. But I did want to note that while we as a subcommittee were discussing this, and we could possibly say this isn't related. But I think it's directly related.

The memorandum came out from the NOP regarding reconsideration of the bio based, biodegradable mulch, which I think well was effecting the process of the need for plastic mulch and covers, in terms of discussion and final decision.

So, since that was something that had been approved, and then was coming back as needing to be re-looked at. And I'll restate what I stated at the last meeting regarding this, which is that, and I'm not going to cite a specific experience.

But there was a written testimony that referred to the fact that there isn't really consistency by certifiers, in terms of the removal
of plastic mulches. And that's, frankly, as a farmer something I've observed as well.

But also I haven't experienced it. But I have observed it on other farms. And I think it's a big yellow flag of how this process happens.

As we know, the manufacturer, and the waste from plastic mulches are the significant concerns. Generally speaking the public supported the re-listing, with questions on the limitations towards using, you know, how can we make sure that people are using other options, instead of using plastic mulches, if that's become habitual or a general practice in something they're doing.

He subcommittee overall supported the re-listing of the plastic mulches and covers. And I think, I just want to throw in there the fact that really I think that plastic mulches in my opinion do not fit within organic systems.

They do not fit within the whole broader picture of what organic means, and what are, factoring in the different issues, especially the
environment are regarding this. And I really think that this is one material that we need to not be continuously having people rely on as farmers, or people who want product then.

So, I think that, you know, the one example I come up with is, you know, like, for example, the strawberries, everybody uses plastic mulch now. Well, 100 years ago organic strawberries, and all strawberries were organic, none of them were grown with plastic mulch.

So I think that, yes, it's depended upon. Is it essential? I think that that goes back to that word of essentiality of, why are we relying on something that we've survived without in the past.

So I will be voting against re-listing for those reasons. And I wanted to share that, and that thinking process with you. Thank you.

MEMBER SONNABEND: Mac.

MEMBER STONE: I just want to suggest that certifiers and inspectors alike work with the growers. Often if it's a crop that's harvested up
until winter, or late season, that wet weather's difficult to remove.

But certifiers and inspectors alike are pretty diligent in working with the growers to be sure that it is removed, given the weather conditions that they deal with.

MEMBER SONNABEND: Colehour?

MEMBER BONDERA: Yes. Mac, I believe you. And I recognize that. Although as you read in what is put forth in a public testimony, it was stated, "We always use black plastic mulch when we establish a vineyard. We do not irrigate.

And the plastic mulch is critical to us getting the baby vines growing over the first three years in the ground. We always take the plastic, the black plastic up after it has been in for four to five years." So, I hear you. But --

MEMBER SONNABEND: Okay. More discussion?

MEMBER TAYLOR: I agree that plastic mulch should not be a part of an organic management system. And I'm working with farmers all the time
that are using alternative methods. They're using straw, or they're using leaves.

But instead of resulting on their own accord, choosing not to use plastic, because they see it as not having a place within the organic management system. So I also support removing it from the list.

MEMBER SONNABEND: Thank you. Anymore discussion? Harold.

MEMBER AUSTIN: Yes. Plastic mulch I think gives us a couple of benefits. One is for the weed control that it's giving in assisting out on the farms.

But it's also because of the removal of that weed barrier, it's also helping enhance the rodent control during the winter months as well, especially in the northwest. So I'm in favor of continuing to leave it on the list.

MEMBER SONNABEND: Anything, anyone else? Okay. Just to point out that we are changing the citation for the subsection in the listing from, to '205.601(b), which is what Lisa
read out is the correct spot on the list.

CHAIR RICHARDSON: Ready for the vote?

All those in favor of removing the plastic mulch and covers from the National List, please raise your hand. Those opposed, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is two yes, 12 no. The motion fails.

CHAIR RICHARDSON: Question from Mac.

MEMBER STONE: I would like to note that there are, this is always based on that real thing row cover. But there's lots of different types of plastics and fabrics and things.

So it's a little more complicated than just thin little, you know, 1.25 mil plastic. So I don't know if that needs to be sort of addressed in a broader view. Since I'm going off, it's easy for me to say.

MEMBER SONNABEND: Next would be ammonium soaps. Lisa.

DR. BRINES: Thank you. The listing for ammonium soaps is at '205.601 of the National
List, Paragraph (d), as animal repellants - Soaps, ammonium for use as a large animal repellant only, no contact with soil or edible portion of crop. Thank you.

MEMBER THICKE: That's me.

MEMBER SONNABEND: Thank you, Francis.

MEMBER THICKE: Okay. There weren't a lot of comments. There were definitely a number of people who wanted to keep it on the list. There were some comments that this is mostly used for deer repelling. Some comments that it really doesn't work anyway, but let's keep it on the list anyhow. That's kind of, so we didn't see any real compelling reason to take it off the list. And the committee voted unanimously to keep it on the list.

MEMBER SONNABEND: Discussion?

CHAIR RICHARDSON: Seeing no discussion, those in favor or removing this from the National List, please raise your hand. Those opposed to removing this from the National List, please raise your hand. Abstentions or recusals?
Seeing none.

VICE CHAIR FAVRE: The vote is one yes, 13 no. The motion fails.

MEMBER SONNABEND: Next is ammonium carbonate. Lisa.

DR. BRINES: Thank you. The listing for ammonium carbonate is at '205.601 of the National List, Paragraph (e), as insecticides, (including acaricides or mite control). (1) ammonium carbonate - for use as bait in insect trap only, no direct contact with crop or soil.

Again, one correction for the record, the citation in the subcommittee vote should be '205.601(e), rather than '205.601(I). Thank you.

MEMBER SONNABEND: Colehour.

MEMBER BONDERA: Okay. So, I have here the fact that there was -- I apologize. I'm staring at my computer because my notes on de-listing and re-listing are mixed up, I think. So, I think that there was minimal support for de-listing.

But frankly, there just wasn't that
I think my comment here is about public input. And they weren't saying that they thought it should be re-listed. So I think not heavily.

I think the input that did come regarding overall essentiality of ammonium carbonate, and that alternatives are possible, I think were mentioned.

And like I already said, the subcommittee vote was against de-listing, was not for the de-listing of, I think that topic of lack of need for me is going to result in my vote for against re-listing it. But other people probably have other comments. Thank you.

MEMBER SONNABEND: Discussion? I'll call on myself, seeing no hands. This suffers along with several of our other listings for having a complicated name that people didn't recognize to put in comment.

If it had said libate on the list we would have gotten hundreds, if not thousands of comments from livestock producers, as well as crop
producers. Because it's the stuff that's used in fly traps.

And so, I don't think we can attribute the lack of public comments to anything other than an obscure name for a very common input. Other discussion?

CHAIR RICHARDSON: Okay. Ready for the question. All those in favor of removing ammonium carbonate from the National List, please raise your hand. Those opposed, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is two yes, 12 no. The motion fails.

MEMBER SONNABEND: Boric acid. Lisa.

DR. BRINES: Thank you. Boric acid is listed at '205.601 of the National List, under Paragraph E, as insecticides (including acaricides or mite control). (3) boric acid, structural pest control. No direct contact with organic food or crops. Thank you.

MEMBER SONNABEND: Discussion? Or, whose material is this? Colehour. Thank you.
MEMBER BONDERA: No, thank you.

Sorry. I was waiting for you to say my name because we can't see each other. It's all good. Yes. I don't have a lot to say about this one, in terms of --

Boric acid, you know, can be used in different ways, is I think the only thing worth noting. It's really, it's least toxic when used as bait and, you know, changing the management can mean that it's not as needed.

I do think, as the lead person on this one I would, I hereby request that an annotation change be put forth that would change the listing to something along the lines of, for use only as bait, or in gel formulation in the listing. So I make that request at this time.

Nonetheless, comments that came in were primarily for re-listing. And it wasn't, I guess one person was absent. And it was a little bit divided. The subcommittee vote was primarily against removing it. Thank you.

MEMBER SONNABEND: Discussion?
Jennifer.

MEMBER TAYLOR: You see the possibility that it could be taken back into committee for a change, annotation change?

MEMBER SONNABEND: We can discuss whether to pursue an annotation change in the subcommittee after this meeting.

MEMBER TAYLOR: After.

MEMBER SONNABEND: But we can't change it right now.

MEMBER TAYLOR: Right. I just wondered if that possibility exists.

CHAIR RICHARDSON: Are you ready for the question? All those in favor of removing boric acid from the National List, please raise your hand. All those opposed to removing, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is one yes, 13 no. The motion fails.

MEMBER SONNABEND: Elemental sulfur.

Lisa.

DR. BRINES: Thank you. There are
three listings for elemental sulfur that will be considered under the Sunset 2017 review. And they were considered as a group in the crop subcommittee proposal.

The listings are as follows, '205.601(e), as insecticides (including acaricides or mite control). '205.601(I), as plant disease control, and '205.601(j), as plant or soil amendments. And each time the listing reads, elemental sulfur. Thank you.

MEMBER SONNABEND: Harold.

MEMBER AUSTIN: Thank you. During the first public comment period we received 20 written comments and numerous oral comments on this material, that provided answers to three specific questions that we had posed to the stakeholders and the public for comment.

There was overwhelming support for the continued listing of elemental sulfur for all three uses from the organic stakeholders. One commenter stated that a survey of their members showed that it was very necessary in organic crop production,
while one certifier showed that it was listed on 2,042 of the organic systems plans of those that they certify.

During the second posting for public comment, prior to the October, this meeting, there were a couple of oral comments that were provided, as well as 38 additional written comments that were submitted, 26 crop producers, one certifying group, three handlers, one crop advisor.

Two stakeholder surveys all showed solid support, critical need, or other miscellaneous reasons why they were in favor of the continued listing of elemental sulfur.

One commenter from Mexico provided both written and oral testimony on one of our two webinars, stating that because of their water source, compost, soil amendments, crop rotation to increase organic matter and lower the soil pH, sometimes was not enough.

Being able to lower the pH using elemental sulfur helps to provide benefits to the crop production, as well as improves their soil and
favors growth and development of microorganisms within the soil profile.

One commenter provided against the listing, asked for an annotation for the use of sulfur, asked us to protect workers and ensure that it does not result in ecological impacts. They asked us to refer this back to the subcommittee. That's what I have, Madame Chair.

MEMBER SONNABEND: Any discussion?

CHAIR RICHARDSON: Seeing no discussion, may we move to the vote? All those in favor of removing elemental sulfur in the three forms as read into the record, please raise your hand. All those opposed to removing elemental sulfur in its three forms from the National List, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is one yes, 13 no. The motion fails.

MEMBER SONNABEND: Next is lime sulfur. Lisa.

DR. BRINES: Thank you. There are two
listings for lime sulfur that will be considered under Sunset 2017. The first is at '205.601(e), as insecticides (including acaricides or mite control). The second is under '205.601(I), as plant disease control.

And one correction for the record, the citation in the motion vote in the crop subcommittee document should read '205.601(i)(6), rather than '205.601(j)(6). It is correct earlier in the document under the reference section. Thank you.

MEMBER SONNABEND: Harold.

MEMBER AUSTIN: Thank you. Again, for both this spring and this fall public comment period there were numerous comments submitted. The first spring meeting there were 20 written comments, plus several oral presentations that were given.

During the second posting for public comment there were 38 additional written comments, plus a couple of oral testimonies. And then we had one really good oral testimony today that we
listened to, regarding lime sulfur.

Of these there were 23 organic crop producers, two organic stakeholder surveys showing continued use for this material. The Northeast Farming Association of Vermont was in support.

Several commenters in support also stated that the use of lime sulfur in combination with horticultural oil gives them optimum control of overwintering populations of San Jose scale and mealy bugs, which are both quarantine pests in markets that they import their crops to. So, for them it was critically important.

One public interest group was against the listing, asked that we table the vote and refer this back to the subcommittee until we limit the uses, specific uses of lime sulfur. That's what I have now.

MEMBER SONNABEND: Thank you. Discussion?

CHAIR RICHARDSON: Seeing no discussion, all those in favor of removing lime sulfur as listed in its two forms, two uses, please
raise your hand. Lime sulfur, lime sulfur. All those opposed to removing lime sulfur from the National List, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: Okay. The vote is one yes, 13 no. The motion fails.

MEMBER SONNABEND: We're on to oils, horticultural. Lisa.

DR. BRINES: Thank you. There are two listings for horticultural oils that are under consideration for Sunset 2017. The first reference is at '205.601(e), as insecticides (including acaricides or mite control). Listing is under (7) oils, horticultural, narrow range oils as dormant, suffocating, and summer oils.

The second listing is at '205.601(I), as plant disease control. (7) oils, horticultural, narrow range oils as dormant, suffocating, and summer oils. Thank you.

MEMBER AUSTIN: Okay. Horticultural oils. During the 2005 Sunset review vegetable oils were one of the materials that were suggested
to replace the horticultural oils.

That was later found that these also use synthetic emulsifiers, and they're not as effective as the horticultural oils themselves for controlling specific diseases and insects. During the first public comment period there were 27 written comments submitted, numerous oral comments.

When certifiers showed that horticultural oils are listed on 1,041 of their organic systems plans, there was an industry survey that showed overwhelming support of the continued use of this material.

During the second posting for public comment there were 30 written comments submitted. Of those there were 18 organic crop producers, three handlers, one international comment from an organic crop producer, two organic trade association comments in favor, IOIA was also in support.

There were two commenters that were opposed to the re-listing. One of these again
asking that this vote be tabled until these materials could be annotated.

Commenters, both rounds helped to explain how horticultural oils are used and why. They also pointed out that these materials are allowed for use worldwide by most organic certifying bodies for use in organic crop production.

During the last Sunset review cycle the actual usages have not changed much, but the overall use has gone up due to the expansion and increase in organic crop production. That's what I have now.

MEMBER SONNABEND: Thank you. Any discussion? Colehour?

MEMBER BONDERA: Yes. I apologize, Harold, but can you remind me what the suggested annotations were? I apologize.

MEMBER AUSTIN: Hang on. Yes. The suggested annotations were to table this until the annotations could come forth to regulate the use patterns for this material to protect workers and
non-target arthropods from harm.

MEMBER SONNABEND: Anymore discussion?

CHAIR RICHARDSON: Okay. Ready for the vote? All those in favor of removing oils horticultural in those two uses as listed, raise your hand. All those opposed to removing this material from the National List, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER SONNABEND: We are on to soaps, insecticidal. Lisa.

DR. BRINES: Thank you. Insecticidal soaps are listed at '205.601(e) of the National List as insecticides (including acaricides or mite control), (8) soaps, insecticidal. Thanks.

MEMBER THICKE: Soap guy here. So, we received a lot of comments from producers who use insecticidal soaps. They're used particularly for soft bodied insects. And the thing that was good about it is that you can, after spraying you
can, there's no residual effect, and can enter the area again.

There was a comment by Beyond Pesticides that said the listing for insecticidal soaps should be annotated in a way that protects non-target arthropods from harm. If this is not possible, insecticidal should be de-listed.

We suggest this annotation, "Must not be used when predators, parasitoids, or pollinators are present." And the committee voted unanimously to retain it on the list.

MEMBER SONNABEND: Discussion?

CHAIR RICHARDSON: Seeing none, all those in favor of removing soaps, insecticidal from the National List, please raise your hand. All those opposed to removing it from the National List, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER SONNABEND: Sticky traps and barriers. Lisa.
DR. BRINES: Thank you. This substance is listed at '205.601 of the National List under Paragraph (e) as insecticides (including acaricides or mite control). (9) Sticky traps/barriers. Thanks.

MEMBER BONDERA: Okay. Sticky traps, barriers. Like it says, it's the wide range of traps and codings made from different materials. And I do agree with the concept that there could be restricted uses and/or limitations via an annotation.

And I, as I did on a few of the others, I request that the crops subcommittee reconsider adding an annotation to this listing, such as, must be used in a way that prevents the capture of non-target animals, for example.

Although I do want to add, in one comment it is mentioned that, you know, in addition to this fact, it is mentioned that some farmers will use these traps to monitor the presence of beneficial insects, which many of us don't necessarily see as positive. But that is what some
people do.

So I think that, you know, that could be considered a target animal, I would estimate. So I think it's a little bit confusing. And that's part of the reason that I think the subcommittee needs to consider this possibility, and/or, like I said, the wording might not be accurate.

I think both the public input and the subcommittee were basically on the same page in terms of re-listing as is. So, thank you.

MEMBER SONNABEND: Colehour, are you prepared to bring specific wording for an annotation change to the subcommittee after this meeting?

MEMBER BONDERA: I'm happy to propose specific wording.

MEMBER SONNABEND: Okay.

MEMBER BONDERA: But like, we'll have to, you know, still discuss it an agree upon it obviously.

MEMBER SONNABEND: Yes.

MEMBER BONDERA: But yes. I'm happy
to work on that.

MEMBER SONNABEND: Okay. Any other discussion?

CHAIR RICHARDSON: Seeing no further discussion, ready for the vote. All those who wish to vote to remove sticky traps and barriers from the National List, please raise your hand. All those who wish to retain this sticky traps and barriers on the National List, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER SONNABEND: Next up is sucrose octanoate esters.

DR. BRINES: Thank you. This listing is included at '205.601 of the National List, under Paragraph (e) as insecticides (including acaricides or mite control). (10) sucrose octanoate esters, task numbers 42922-74-7, 58064-47-4, in accordance with approved labeling.

Just one note for the record, the reference in the packet also references the listing
at '205.603. But that will be considered separately by the Board under the livestock portion of the agenda, later this week. Thank you.

MEMBER SONNABEND: Francis.

MEMBER THICKE: Yes. Sucrose octanoate esters, or SOE, are allowable in crops and livestock to control soft bodied insects like white flies, aphids, and mealy bugs. We received some public comment, some support, not a lot of comments.

We received one comment opposed to it by Beyond Pesticides, saying that the technical reviews provide insufficient information to evaluate SOEs relative to aqua criteria.

Considering the absence of information, and absence of support for re-listing, we support the de-listing of SOE. The committee voted zero six in favor of re-listing.

MEMBER SONNABEND: Discussion?

CHAIR RICHARDSON: Seeing no discussion, ready for the vote. All those in favor or removing SOEs from the National List, please
raise your hand. Those opposed to removing it, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is one yes, 13 no. The motion fails.

MEMBER SONNABEND: Okay. We're on to pheromones. Lisa.

DR. BRINES: Thank you. The listing for this substance is at '205.601 of the National List under Paragraph (f) as insect management pheromones. Thanks.

MEMBER AUSTIN: Okay, pheromones. During the first posting for public comment for this current Sunset cycle, there were numerous public comments provided both in writing and oral.

Several certifiers provided comments, one stated that they listed on 450 of their producers' organic systems plans. The overwhelming trend from the grower comments were that they, that how necessary these were to crop production processes. And that the loss of them would mean the removal of many acres of organic crop
Tree fruit growers stated that this is their first line of control for pests such as codling moth and leaf roller. They also mentioned that the use of pheromones has increased during this past Sunset cycle, largely due to the increase of organic crop production, and especially as formulations have now been developed for specific targeted pests.

During the second posting for public comment there were 256 written comments submitted. Of these there were 14 grower producer comments, three handlers, one certifier providing comments to inputs reviewed, two stakeholder surveys showing their support for the continued listing, a trade association listing support, and several others that were still in favor, in support of.

Again, organic crop producers stated how pheromones are the foundation for a safe and effective control of the single most destructive pest in organic apple production, the codling moth. There is no effective replacement to aid in the
control of the codling moth or the leaf rollers. Another commenter stated that pheromones have changed their entire chemical usage of chemicals, not only organically, but in their conventional crop production as well, for the betterment of our entire industry.

One public interest group commented, asking that, they would be okay with the listing if it was annotated. The annotation they felt better than the current annotation, needs to be limiting, in more passive dispensers without added toxicants, and only approved inert ingredients.

MEMBER SONNABEND: Thank you, Harold. Discussion?

CHAIR RICHARDSON: Seeing no discussion, all those in favor of removing pheromones from the National List, please raise your hand. All those opposed to removing pheromones from the National List, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is one yes, 13 no. The motion fails.
MEMBER SONNABEND: Now we move on to Vitamin D3. Lisa.

DR. BRINES: Thank you. This substance is included at '205.601 of the National List under Paragraph (g), as rodenticides, Vitamin D3. Thank you.

MEMBER SONNABEND: Carmela. Isn't this yours? Vitamin D3? Oh, no, it was --

MEMBER BONDERA: I have it.

MEMBER SONNABEND: -- Paula's right. So who did --

MEMBER BONDERA: Yes. I took it over from Paula.

MEMBER SONNABEND: Oh, sorry.

MEMBER BONDERA: No, it's fine. It was confusing. When Paula left us we passed them on.

MEMBER SONNABEND: Okay.

MEMBER BONDERA: And it wasn't, frankly, I wasn't really prepared the other day either. I'm like, which items are mine? And I had to look at two different lists, because I forgot
about, that I took over some of Paula's. So, I had
to review what was done. But I am as prepared as
I am going to be for it. I haven't worked on it
a lot. But looking through this Vitamin D3, which
is used as a rodenticide, like was stated, you know,
the questions or comments which are stated in our
recommendation, or referred to at some level, are
things related to the potentiality of human deaths.
Non target toxicity is big. Like I said, children
or pets, you know, accidentally consuming what is
being used, had been placed as a rodenticide. And
then the question of alternatives regarding traps
or non-synthetic rodenticides, and their
effectiveness. Generally speaking, the public
comment was for re-listing, primarily, I mean, what
I wrote down was six to two. So the ratio wasn't,
you know, that's 75/25. The subcommittee was,
like it says, fully against whatever it is, opposed
to de-listing. So, that's what I put together.
I'm sure there's other additions. So, thank you.

MEMBER SONNABEND: Jean, did you have
your hand up?
CHAIR RICHARDSON: May I have a question? Colehour, did, when you looked into this, did you find that the Vitamin D3 is really only used as a last resort? In other words, the farms have been doing everything from a management point of view to not have it? Did you find that most of them have to get specific permission from a certifier to use the D3?

MEMBER BONDERA: I'm not going to be able to respond to that as thoroughly as I'd like to. I think that ideally, yes. But there's definitely, you know, one of those questions of, you know, to what degree that was either verified or things were tried, is not always that clear. So, I think your point is good though, that it's not necessarily meant as the first approach. But I think that, you know, habit also can mean that that continues, even if used where it was used, versus trying other things when you're good.

MEMBER SONNABEND: Okay. Mac. And then I'm going to call on myself.

MEMBER STONE: So, at the farm level I
think certifiers when they haven't seen the use of this product before, then it ratchets up. Well, why are you needing it now kind of thing. So with food safety modernization and handling, you know, the use of the traps where other animals can't get to it, and all, is pretty common practice to meet food safety standards.

MEMBER SONNABEND: I wanted to say something somewhat similar, which is that in crop field situations, such as this, it doesn't tend to work that well. So almost always the grower will have tried a lot of other things before trying this. Because they know it's not going to work that well, and you have to use regular mechanical traps with, you know, peanut butter or something else as bait. And also, clearing away habitat areas as the two main lines of defense. I think it's different in structural pest control situations though. But that really should fall under the National List in the handling portion more. And there it's the most benign in the hierarchy of more troubling things that could be used on the perimeters of buildings
and things. And so, it's a different story there. Nick.

MEMBER MARAVELL: Yes. Just to give you anecdotal information, we list Vitamin D3 as a sort of last resort on our organic system plan. That's the understanding we have. We list about six other things that we would do first. And compare it with, and we don't use it if it doesn't work in those situations. And to concur with what Zea just said, it's not, in structural situations the handling is probably more effective.

MEMBER SONNABEND: Further discussion? Okay.

CHAIR RICHARDSON: Ready for the vote. If you wish to remove Vitamin D3 from the National List, please raise your hand. Those opposed to removing it from the National List, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote was three yes, 11 no. The motion fails.

MEMBER SONNABEND: Okay. Copper sulfate and copper fixed we could perhaps take
together.

DR. BRINES: Okay. Great. Fixed coppers are included at '205.601 of the National List under Paragraph (I) as plant disease control. (2) Coppers, fixed, copper hydroxide, copper oxide, copper oxychloride, includes products exempted from EPA tolerance. Provided that, copper-based materials must be used in a manner that minimizes accumulation in the soil and shall not be used as herbicides. The second listing for copper sulfate also at Paragraph (I), number (3). Copper sulfate - Substance must be used in a manner that minimizes accumulation of copper in the soil. Thank you.

MEMBER SONNABEND: Okay. I'm the lead person on this one about these two. You know, copper, as everyone knows, has been controversial over the years. It's not the safest material of those that we have to use to produce organic crops. And there's been a lot of discussion on the
annotation, and whether it's really effective, and assures the necessary safety in its use, and in not leading to copper accumulation. There are issues been raised concerning overuse and abuse, concerning worker safety concerns, concerning acute toxicity if used outside of the label directions. But in general, when used in a manner that follows the label directions, and is appropriate for the site specific conditions, with most of the testimony we've heard is that is has not led to accumulation in the soil. This includes our survey after the first posting of certifiers. Well, not survey, but we posed the question in the first posting of whether they had, whether they were enforcing the annotation, and what they were seeing as a base, based on that. And most of the certifiers responded that it was in use by a very lot of their clients. And that they were requiring some sort of monitoring plan. And that they had not issued, they had, no one reported any instances of accumulation in the soil that led to a decertification or suspension. And a few of them
had issued a non-compliance for not having a suitable monitoring plan. But presumably those would have been corrected before a suspension occurred. And what we also know about copper is that soils vary extremely widely in what happens, in their amount of natural copper in them, and what happens to them when copper is added. And so, many soils are naturally deficient in copper. Many soils have enough going on in the soil biologically that they, copper is able to be assimilated into humus or rendered, well, buffered enough by the soil situation that we do not see accumulation occurring, including a fairly large dataset, as we heard from Dr. Grubinger this morning. So, we have, we did not request a new TR. But there was a fairly recent TR which did address the NOSB criteria. And we considered a few different possibilities of additional annotations in the subcommittee level. But none of those rose to the top as an additional annotation that we wish to put on this thing. In the public comment for this time a few additional annotations have been proposed.
It was suggested that we do a crop by crop necessity analysis. And it suggested that we somehow take some steps to limit situations of overuse of copper. None of the suggestions so far has been specific enough to me to work as an additional annotation. But anyone who does have specific language, who wishes to petition for such afterwards could lead us to take it up again. And so, after discussing it in the subcommittee we have voted unanimously to not remove it from the National List, among those who were present at the meeting. And not change the annotation beyond the one that is on there currently. Discussion? Colehour?

MEMBER BONDERA: Yes. I think it's worth noting that at the subcommittee level there was abstention in terms of reaching a conclusion, based in part on what you just referred to of the annotation discussion. So --

CHAIR RICHARDSON: Oh, yes.

MEMBER BONDERA: I just wanted to remind everybody of that fact. Because I think
that what you say is completely accurate, that this is very complicated, and there's lots of options. And so, in terms of how, you know, coming up with the wording or addressing this is not so simple. And we could pursue an annotation via a petition process. I personally think that we, the NOSB should be pursuing an annotation via the subcommittee level. But you're going to ask me back, will I write it? And I haven't come up with any verbiage either. So I'm not going to be volunteering to lead that, just because I'm saying that I think we need it. Thank you.

MEMBER SONNABEND: Thank you for the correction, Colehour. I was looking at my notes, reading abstain as absent, which are very close together, both physically and in word. Harold.

MEMBER AUSTIN: Thanks, Zea. As we heard in the spring meetings, both in written and then at oral testimony, the northwest has a lot of deficiencies, actually, with copper. Copper is also a main material that those comments told us for controlling corundum blight in their cherries,
as well as now with the loss of antibiotics, it is the primary defense for the organic tree fruit growers in the Northwest, protecting their crops from overwintering fire blight bacteria. So it's widely used, and widely relied upon, at least up in the northwest from the comments that we received from the spring. And then a few of the written comments and oral testimony this year on the fall, for the fall meeting.

MEMBER SONNABEND: Anymore discussion? Jean.

CHAIR RICHARDSON: Was there a discussion in the subcommittee of trying to come up with an annotation which would allow a better understanding of the geographical regional variation in the copper levels that are already there in the soils, where the impact may be higher in some of these coppers in one area as opposed to other?

I mean, we heard this morning that in, from Dr. Grubinger, that in this area that he works in the, it's not an issue. However, obviously in
some parts of the country it may be an issue. So was that discussed as a potential annotation in subcommittee?

MEMBER SONNABEND: No. Because we don't even know how to get a handle on which parts of the county it is problematic in, versus others. You know, most of us are from, on the subcommittee are from copper deficient areas.

Out of five people there are four from the West, and then Francis. And then Francis didn't really mention if it's a problem in his area. But we're kind of short of subcommittee members for doing a lot of investigative work.

MEMBER THICKE: I could mention too that if we're going to look at regional differences, we should also look at difference in the soils, and their ability to be able to buffer.

MEMBER SONNABEND: Jennifer.

MEMBER TAYLOR: I see within your annotation you might be able to look at cultural --

MEMBER SONNABEND: Louder, please.
MEMBER TAYLOR: Cultural management strategies as well. It might be something that you could look at in the annotation.

MEMBER SONNABEND: Anyone else?

Okay.

CHAIR RICHARDSON: Ready for the question. All those persons who like to remove the two coppers, fixed and sulfate, from the National List, please raise your hand. All those who would like to see the two coppers remain on the National List, please raise your hand. Any abstentions or recusals?

VICE CHAIR FAVRE: The vote is two yes, 12 no. The motion fails.

MEMBER SONNABEND: Okay. We'll move to hydrated lime. Lisa.

DR. BRINES: Thank you. The listing for hydrated lime is at '205.601 of the National List, Paragraph (I) as plant disease control. (4) hydrated lime. Thank you.

MEMBER SONNABEND: Okay. Thank you. Well, hydrated lime is a little, fairly simple
material. It is an essential component in the manufacture of lime sulfur. And also Bordeaux mix, which would be copper sulfate mixed with hydrated lime.

It's used to control a variety of pests in a variety of crops. And has been used for 200 years or more with no established record of developing resistance to it that we could find.

The commenter, there was support for this material. And I did not, I must have breezed by it. But I didn't see specific points raised in opposition to this material. Perhaps someone else on the subcommittee captured that.

But we didn't get a great many comments on it, only a few. Because people, it's an easy thing to take for granted because it's usually part of something else, some other mixture which is often tank mixed at home, but could be bought as a separate product. So, is there any discussion concerning hydrated lime?

CHAIR RICHARDSON: Ready for the vote?

All those in favor of removing hydrated lime from
the National List, please raise your hand. All those opposed to removing hydrated lime from the National List, raise your hand. The chair notes one absence. Are there any abstentions or recusals?

VICE CHAIR FAVRE: The vote is zero yes, 13 no, one absent. The motion fails.

MEMBER SONNABEND: Potassium bicarbonate. Lisa.

DR. BRINES: Thank you. Potassium bicarbonate is listed at '205.601 of the National List under Paragraph (I) as plant disease control. Number (9) potassium bicarbonate. Thank you.

MEMBER SONNABEND: I believe that's Harold.

MEMBER AUSTIN: Correct. Okay. For potassium bicarbonate there was a limited scope TR done on January of this year. This limited scope TR looked at two specific evaluation questions.

It asked about the actual substances or products that might take the place of this material. It also asked about alternative
practices that would make this material unnecessary.

While the limited scope TR did a good job of identifying the possible alternative materials or practices, further clarification the subcommittee felt was needed around the efficacy of those possible replacements, and identification under which conditions or scenarios the materials under review might possibly be the best replacement, or give better control.

During the first public comment period both written and oral comments at the La Jolla meeting, organic producers helped to add a little bit of clarity to those questions. In part organic producers response was that this material was still very necessary in organic crop production, especially as part of a resistance management process for mildew.

Several certifiers stated that this material was extensively still used, and showed up on numerous of their clients' organic systems plans. The organic producer comments also helped
to inform us that in different scenarios, and under different conditions potassium bicarbonate might be the best material to us, while at another time one of the alternatives might work best for the control of the specific disease targeted.

During our second public comment period there were 26 written comments. Fourteen of those were from producers in support of the continued listing, as well as three handlers, one trade association, IOIA.

One certifier listed inputs reviewed. One university member was in support, one crop advisor, two stakeholder surveys showing its continued usage and need.

Because of its unique mode of action one comment stated that it helps in resistance management where it can be a problem, which was also heard in the first round of public comments.

One public interest group was not in support of the re-listing, stating that potassium bicarbonate did not fit into any categories listed under 65 17(c)(1)(e)(1) of OFPA. That's it.
MEMBER SONNABEND: Thank you. Discussion? Okay.

MEMBER BONDERA: Sorry.

MEMBER SONNABEND: Colehour.

MEMBER BONDERA: Harold, and I apologize. I'm going back to ask you further on a comment that you just cited. But did you look into that question that you just quoted at all, after, upon review, in terms of whether or not potassium bicarbonate fits within the OFPA section cited?

MEMBER AUSTIN: At this point it's a material that's been listed, has been listed since its inception on to the National List. I defer to the program if they have any clarification on that, or not.

DR. BRINES: Clarification on the question, Colehour. The question is whether the substance meets the OFPA criteria?

MEMBER AUSTIN: Exactly. What the position for not supporting the listing was that under that particular section, that citation,
which limits the types of synthetic materials that are allowed in organic production, copper and sulfur compounds, toxins derived from bacteria, pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals, livestocks, parasiticides and medicines, and production aids. That's what they were referring to in that public comment.

DR. BRINES: Right. I would have to go back to the original review. My initial reaction is that it was probably considered as a mineral, which is one of the allowed categories under OFPA. But it would, as part of the review process when the NOSB recommended that material, it would have been subject to that review.

And also, as the rulemaking process we do verify the eligibility of the material in review of the Board recommendation for proposing to add a material to the National List.

MEMBER BONDERA: Thank you.

MEMBER SONNABEND: Discussion, anymore?
CHAIR RICHARDSON: Ready for the question? All those in favor of removing potassium bicarbonate from the National List, please raise your hand. Those opposed to removing potassium bicarbonate from the National List, please raise your hand. Any recusals or abstentions?

VICE CHAIR FAVRE: The vote is one yes, 12 no, one abstention. The motion fails.

MEMBER SONNABEND: Next is aquatic plant extracts. Lisa.

DR. BRINES: Thank you. This listing appears on '205.601 of the National List, under Paragraph (j) as plant or soil amendments. Number (1) Aquatic plant extracts (other than hydrolyzed). Extraction process is limited to the use of potassium hydroxide or sodium hydroxide. Solvent amount is limited to that amount necessary for extraction. Thank you.

MEMBER SONNABEND: That would be Carmela.

MEMBER BECK: So, there was public
comment support in favor or re-listing aquatic
plant extracts. It's in active use by the trade.
And continues to be considered necessary to the
production of fruit and vegetables.

The subcommittee identified in our
proposal concern about potential seaweed over
harvesting. And we appreciate the written and
oral public comment presented on this topic.

As Zea indicated earlier today, the
subcommittee will prioritize the request for a TR
to determine potential future Board action on this
topic across subcommittee.

MEMBER SONNABEND: Discussion? Jean.

CHAIR RICHARDSON: This is one of
several materials that are presently on the list
that I have a bit of a problem with, you know, as
a person trained in biogeography. I sort of hate
to see all of these kelp and seaweed-y words being
used on the National List with an amazing lack of
clarity.

And I think it is time for all of these
materials to be, all the materials that are sort
of aquatic, seaweed types, and so forth, to be returned -- not returned obviously, we're going to vote on them today. But that all of them should be re-looked at.

And each of the appropriate subcommittees, as we come to them during this week, crops is just one of them, and there should be clarification as to what it is we mean by the seaweed that's named.

Because kelp is just a broad word that applies to an enormous range of specific plant species that are available in aquatic ecosystems. And they should be referred to by their Latin names at all times, so that we're clear as which ones that we're encouraging use of.

Especially given the situation in regards to the marine ecosystems, and the impact of human usage on them over the last decade or so. So, it's a hard one for me to be able to vote yes or no on.

MEMBER SONNABEND: I would agree with what Jean has said. Although I'm clear on voting
to keep this on the list. But both the written and oral comment brought up some very significant issues that we have to look at in requesting a new TR for these.

One is proper reference to the Latin name, and perhaps limiting it to not all the Latin names of all the possible aquatic species, where some are much more prone to be over harvested, and much slower regrowth than others.

And secondly was the issue in the written comments concerning the arsenic accumulation in some of the species in some of the harvested areas. And we're going to have to ask the TR to do a survey worldwide. Because so far we've really only heard from Maine and Canada harvest interests.

But of course, the seaweeds and related species are worldwide produced and harvested. And some of these may be far more sustainable than others. And so, we have to take a look at all these issues. And the crops subcommittee will take this up. Anyone else have discussion?
CHAIR RICHARDSON: Ready for the question? All those in favor of removing aquatic plant extracts from the National List, please raise your hand. Those who wish this material to remain on the National List, please raise your hand. Any abstentions? Any recusals? No absences. A roll call vote has been requested by Ms. Taylor. We will do a roll call vote, starting from Calvin.

(Roll call vote)

VICE CHAIR FAVRE: All right. The vote was five yes, six no, three abstentions. The motion fails.


DR. BRINES: Thank you. This listing is at '205.601 of the National List, Paragraph (j) s plant or soil amendments. (3) Humic acids - naturally occurring deposits, water and alkali extracts only. Thank you.

MEMBER SONNABEND: That would be Carmela.

MEMBER BECK: So, there was
substantial public comment support in favor of re-listing humic acids. Humic acids are in active use by the trade, and continue to be considered necessary to the production of fruit and vegetables.

There was some subcommittee concern regarding over reliance on the material in the absence of adequate soil building practices. The subcommittee might discuss potential annotation if applicable.

MEMBER SONNABEND: Discussion? Francis.

MEMBER THICKE: I have some concerns about such widespread use of humic acids in organic farming, mining and adding them. Keeping in mind that a major constituent of regular organic matter is humic acid. And we should be creating it in situ by our farming practices, not having to mine it and put it on the soil.

MEMBER SONNABEND: Further discussion? Colehour.

MEMBER BONDERA: Yes. I just wanted
to repeat what also was, did come up in public
coment, and we did discuss at the subcommittee
level to some degree, regarding the -- I'm trying
to find the right word.

But the manner of extraction of the
humic acids is, you know, either synthetically
extracted or, the types of extractions used, the
materials used for extractions was a significant
component.

And we even cite, and I don't know if
there's any updates at all, in terms of
classification of materials, final guidance
issues, like the synthetically extracted humic
acids.

They're not allowed in Japan. I think
these are significant components of making the
determination, and what is listed as it's listed.
Thank you.

MEMBER SONNABEND: Harold.

MEMBER AUSTIN: Yes. In a lot of the
written comments that we received in the spring,
and then several for this meeting, a lot of the tree
fruit growers, especially in the Northwest, cited comments and support of continued listing of the humics.

Those growers are dealing with organic matter that's less than one percent. So for them, even though they're using compost, and they're using other materials, it was brought to our attention that the continued use of humic acid for them was pretty critical in the establishment of the soil health and microbial activity.

MEMBER SONNABEND: Okay. I'd like to add to that, that we heard really a lot of public comment concerning all different ways that people use it. But key among them was in the transition period, while they're still trying to build up their soil organic matter.

During that three years when they're starting from scratch they find it a particularly useful tool to use extracted humic acids. And one other thing that was touched on briefly in public comment is, because of it, humic properties when used in foliar spray, it really helps the plants
absorb the other nutrients that you're putting on with it.

So, we, for instance, use a fish product in a base of humic acid to help the plant take it up better. Any other discussion? Jennifer.

MEMBER TAYLOR: What we need to look a little bit more into how the process of making it, that we could distinguish a synthetically made one, versus --

MEMBER SONNABEND: Okay. There are, well, there are four forms that humic acid get, five forms that humic acids get onto organic ground. One is compost itself contains a certain amount of humic substances, although very small amounts, and tightly bound in the humus particles themselves. But that would be, you know, the most traditional, slowest way.

Then there's pure mined humate material, which is called leonardite, and probably some other mineral names too. And comes from mines throughout the United States, although mostly in the west. And way more in the United States than
Then, for extracting humates they will extract the mined materials with water at the most simple method, with alkali, such as we're talking about in the National List listing. And the alkali is usually potassium hydroxide. Or with other naturally occurring minerals such as potassium carbonate.

And those would be the extracted humic acids that we're talking about. These were, the alkali extraction was extensively reviewed when this was put on the National List. And of course, the mined humates would be allowed without, because they're non synthetic, without having to go on to the National List.

And I should also mention that we do now have equivalency with Japan. And so, the use of extracted humic acids does not affect trade with Japan.

CHAIR RICHARDSON: Looks like we're ready for the vote. All those in favor of removing humic acids from the National List, please raise
your hand. Removing. All those opposed to removing from the National List humic acids. Any recusals or abstentions? Seeing none.

VICE CHAIR FAVRE: The vote was four yes, ten no. The motion fails.

MEMBER SONNABEND: Thank you. Next is lignin sulfonate. And we're going to do the Sunset review at this time. And if it remains on the list after the vote, then we'll consider the petition to remove separately on the last day. But this will be a Sunset vote to remove or renew. Lisa.

DR. BRINES: Thank you. And there are two listings for lignin sulfonate that are under review by the crops committee. So we'll take them up separates, consistent with the crops subcommittee proposals.

So the first listing is at '205.601(j) as plant or soil amendments. (4) lignin sulfonate chelating agent, dust suppressant. And for clarification, this is not the listing that's impacted by the petition later on the agenda. Thank you.
MEMBER SONNABEND: Okay. This is Carmela's.

MEMBER BECK: So there was public comment support in favor of re-listing lignin sulfonate as a chelating agent and dust suppressant. Lignin sulfonates are in active use by the trade, and continue to be considered necessary.

MEMBER SONNABEND: Thank you. Discussion? Okay. Just a reminder that this is not the one the petition is for. And this is the one out of subcommittee that we recommend re-listing.

CHAIR RICHARDSON: Those in favor or removing lignin sulfonate from the National List, please raise your hand. As I, specifically as a chelating agent, dust suppressant. Those opposed to removing the lignin sulfonate as a chelating agent from the National List, please raise your hand. Are there any abstentions or recusals? And I see no absences.

VICE CHAIR FAVRE: The vote is seven
yes, seven no. The motion fails.

MEMBER SONNABEND: Before we move on I just have to say --

MEMBER CHAPMAN: I would like to call for a voice vote.

MEMBER SONNABEND: A roll call vote?

CHAIR RICHARDSON: Voice vote, a roll call vote has been called by Tom. We will start with Mac.

(Roll call vote)

VICE CHAIR FAVRE: All right. Thank you for that correction. We had eight yes, six no.

MEMBER SONNABEND: Are we moving on? Okay.

VICE CHAIR FAVRE: All right. This is what happens when you put amateurs in charge of counting votes. All right. We have consensus among the Board. It's seven yes, seven no. The motion fails.

MEMBER SONNABEND: Okay. I find this very distressing that it came out of committee unanimous. There was no public comment against,
for removing it. And yet, seven people voted to remove it without one word of explanation in the discussion to the public. That is irresponsible of my fellow NOSB members who voted to remove it.

So now we're going to move on to the other lignin sulfonate. Shame on you. The next material is lignin sulfonate. Lisa has already read it. Or have you?

DR. BRINES: Not yet.

MEMBER SONNABEND: Okay. So, Lisa.

DR. BRINES: Thank you. The second listing for lignin sulfonate is at '205.601 of the National List under (l), as floating agents in post-harvest handling. (l) lignin sulfonate. Thank you.

MEMBER BECK: All right. So there was 100 percent public comment support in favor of removing lignin sulfonate for use as floating agent from the National List. Lignin sulfonate for use as a floating agent are no longer in use by the trade. And it's therefore no longer considered to be necessary.
MEMBER SONNABEND: Thank you. Is there discussion? Or would anyone like to explain themselves retroactively, so I know it's right on the cover sheet? Jean, and then Harold. Carmela already spoke about it.

CHAIR RICHARDSON: Okay. So, commenting on lignin sulfonate as a floating agent, post-harvest handling. And also in the one before. Lignin sulfonate is one of those materials that, well, Jean doesn't really like it all.

Because it is a, it comes as a byproduct from the pulp and paper industry process. And I have just never been comfortable with the extent to which there are a wide range of residues potentially in lignin sulfonate.

MEMBER SONNABEND: Harold.

MEMBER AUSTIN: Okay. Lignin sulfonate for this particular usage, as a floating agent, has really pretty much been mothballed by the producers, both organically and conventionally, just because they're, it's been
used to transport pears when they're packing it, to get them to float, so they could go up over the packing line.

Most of the packing houses now have gone to a boatless water conveyor system, set of belts within their packing facilities. So the need for this particular use has really pretty much gone away. So I'm going to vote in favor of removing this when we come to a vote.

MEMBER SONNABEND: More discussion? I'd like to ask Jean what she bases that opinion about residues in the lignin sulfonate on.

CHAIR RICHARDSON: I didn't bring all my notes on this one with me. And I believe I commented on it also at the last meeting. Is that byproducts of the pulp and paper industry find, that produce the pulp is, waste materials is produced from a large number of the different pulping processes.

And some of those pulping processes are worse than others. But all of them have the potential to come, to include things like dioxins,
for example, which from research that I did a number
of years ago are not indicated as being that super
healthy. Endocrine disrupters. And there are a
range of others that remain in. And I don't have
them in front of me today. And I apologize.

MEMBER SONNABEND: Anymore
discussion? Tracy.

VICE CHAIR FAVRE: I'll only add that
we looked at this pretty extensively as part of the
aquaculture materials and livestock. And that's
where I think some of these opinions have been
formed as far as the manufacturing process of the
material.

MEMBER SONNABEND: Okay. Any other
discussion?

CHAIR RICHARDSON: There being no
further discussion, all those in favor of removing
lignin sulfonate as a floating agent in
post-harvest handling, please raise your hand.
Anyone wishing to leave this material on the
National List, please raise your hand. Any
abstentions? Any recusals? And no absences.
VICE CHAIR FAVRE: The vote is 14 yes, zero no. The motion passes.

MEMBER SONNABEND: Thank you. We will now consider the petition to have been resolved as well. Right? Yes. Okay.

CHAIR RICHARDSON: Next, is there any desire to take a ten minute break?

VICE CHAIR FAVRE: Sure.

CHAIR RICHARDSON: Okay, a bathroom break. There you go. That's what we're asked for. There will be a ten minute break. And then we'll return back and complete the crops Sunset materials before we break for the evening. Thank you.

(Whereupon, the above-entitled matter went off the record at 4:15 p.m. and resumed at 4:25 p.m.)

CHAIR RICHARDSON: All right, we are ready to continue and complete the Sunset on the crops materials. And the next material, Zea, if you would take it over, please. If you would like to talk, if you could go outside that will be fine,
but not in here.

MEMBER SONNABEND: Okay, everyone, we're reconvened. Helps to have a loud voice. Our next item is magnesium sulfate. Lisa?

DR. BRINES: Thank you. The listing for magnesium sulfate is at section 205.601 of the National List under Paragraph j as plant or soil amendment. Five magnesium sulfate allowed with the documented soil deficiency. Thank you.

MEMBER BECK: So there was substantial public comment support in favor of relisting magnesium sulfate. It is in active use by the trade and continues to be considered necessary to the production of fruit and vegetables.

As Marty mentioned today, the subcommittee could look at changing the annotation if applicable to read deficiency must be documented.

MEMBER SONNABEND: Okay, is there any discussion, particularly among people who want to vote it off and explain why before we have the vote.

CHAIR RICHARDSON: I am seeing no
discussion. Harold, stop laughing. Okay. I am seeing no discussion on this material. We move to a vote. All those who wish to remove magnesium sulfate from the National List, please raise your hands and have an answer as to why you're doing it.

All those who wish to leave this material, magnesium sulfate, on the National List, please raise your hand. Are there any abstentions or recusals. No absences, okay good.

VICE CHAIR FAVRE: There is one yes, thirteen no's, the motion fails.

MEMBER SONNABEND: Okay, next is micronutrient. Lisa?

DR. BRINES: Thank you. There are two listings for micronutrients that will be considered as a group under 205.601(j) as plant or soil amendment, six micronutrients not to be used as a defoliant, herbicide, or desiccant.

Those made from nitrates or chlorides are not allowed. Soil deficiency must be documented by testing. I soluble boron products, II or two sulfates, carbonates, oxides, or silicates of
zinc, copper, iron, manganese, mallipattinam, selenium and cobalt. Thank you.

MEMBER BECK: So once again, there was substantial public comment support in favor of relisting micronutrients. The proposed annotation change will be discussed on Thursday. Micronutrients are in active use by the trade and they continue to be considered necessary to the production of fruits and vegetables.

MEMBER SONNABEND: Discussion? I'll start. A couple of our public commenter seemed confused that the first sentence of the subcommittee review had a list of micronutrients that was not the same as the one in the actual National List reference.

And that included nickel and chromium which are not on the National List. So I'm wondering if we can strike those two words from the subcommittee review portion to make it consistent?

CHAIR RICHARDSON: I believe that the ruling from the NOP is that this is not a substantive change and we can do that.
MEMBER SONNABEND: Thank you. And do we have to take a vote to do that, or do we have general consensus, because I didn't notice this discrepancy until public comment came in.

CHAIR RICHARDSON: Is there general consensus on the Board that we can make this non-substantive change to remove these two materials from this list? Say again which two they are, they are?

MEMBER SONNABEND: Nickel and chromium.

CHAIR RICHARDSON: Nickel and chromium.

MEMBER MARAVELL: I assume this was just a mistake. Yes, that's fine.

DR. BRINES: If I could clarify, I think the proposal had listed chromium and nickel just as examples of micronutrients that are used. I don't think specifically in the text it indicated that those were for use in organic production, but was more generally talking about micronutrients.

MEMBER SONNABEND: I understand that,
but some members of the public appear to think that it would allow them.

CHAIR RICHARDSON: Are we ready for the vote? Jennifer.

MEMBER TAYLOR: CID thinks that it might be possible for an annotation for this, anything to have the user maybe refer to their organic system plan of use cultural practices that also may improve the health of the soil or the system or any kind of annotation to use?

MEMBER SONNABEND: It has an annotation currently, soil deficiency must be documented by testing, and we're proposing a change to that which will be discussed Thursday.

Additional changes to the annotation would have to go back to the subcommittee and be discussed.

CHAIR RICHARDSON: Ready for the question? All those who wish to remove micronutrients as read into the record from the National List, please raise your hand. All those who wish to leave micronutrients on the National
List, please raise your hand.

Any absences or recusals? Mac, I didn't see your hand. Okay. His hand is there, okay. No abstentions, no recusals, no absences, thank you.

VICE CHAIR FAVRE: That was zero yes, fourteen no, the motion fails.

MEMBER SONNABEND: Liquid fish products, Lisa?

DR. BRINES: Thank you. The substance liquid fish products is currently listed at Section 205.601 of the National List under Paragraph j as plant or soil amendments.

Number 7, liquid fish products can be pH adjusted with sulfuric, citric, or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5. Thank you.

MEMBER BECK: So once again, there was substantial public comment support in favor of relisting liquid fish products. Liquid fish products are in active use by the trade and continue to be considered necessary to production of fruit
and vegetables.

The subcommittee identified in our proposal concern regarding the sustainable harvesting of fisheries. We plan to address our concerns with the TR request.

MEMBER SONNABEND: Discussion? Tracy? Tracy?

VICE CHAIR FAVRE: This is one I've really kind of gone back and forth on. I definitely think it's an important tool for farmers, but I'm also concerned about the environmental impact, so I'm glad we're going to see the TR. And while I'm going to vote to keep it on the National List, I do have some reservations about it.

MEMBER SONNABEND: Jean?

CHAIR RICHARDSON: As with all the other, the fish, liquid fish, seaweeds, all that from the ocean, I also have ongoing serious concerns about them.

I have to admit and disclose that I definitely use the liquid fish products in my
gardens, and it's great and it works just super. And so the idea of actually voting against it, I know I would get into a lot of trouble from a large number of stakeholders.

But it's really quite difficult for me on this just because we don't really have, I think as of yet, adequate information to really fully address the range of marine aqua system issues that come from this. So I'm glad that we're going to be pursuing it in more detail in the crop subcommittee in the next session.

MEMBER SONNABEND: Tracy?

VICE CHAIR FAVRE: Just to follow up, I neglected to mention that we've discussed sort of amongst ourselves when we were struggling with some of these issues a discussion about the fact that it seems more important, it has one purpose in crops and a different one, for instance in handling, even though it's still a sea product.

And so there is sort of a sense that maybe we need to look at this more as a systems approach and comprehensively rather than, you
know, one specific use at a time and see if we can
get a better sense for a comprehensive approach to
it. So hopefully we'll get some feedback. You're
looking confused.

MEMBER SONNABEND: Do you mean trying
to combine fish in handling with fish in crop?

VICE CHAIR FAVRE: No. Just sort of
looking at the overwhelming impact of the
harvesting of sea products, whether it's seaweed
or fish or fish products, and sort of try to wrestle
some of that around. I know that didn't sound very
articulate, I'm sorry.

MEMBER SONNABEND: Jean?

CHAIR RICHARDSON: Did you get any data
in the crop subcommittee when you were working on
this or from additional public comment? I
certainly didn't see any on the actual amount of
liquid fish that is utilized in this aspect of the
fish byproducts that come from marine ecosystems?

MEMBER SONNABEND: Carmela, can you
address that?

MEMBER BECK: Well, the question is how
much is utilized? No, I don't know that. We've
got, like, number of products that are out there.

    MEMBER THICKE: It's pretty widely
used in the Midwest for organic production.

    MEMBER SONNABEND: And I'll call on
myself. Not only is it extremely widely used, I
think we had it on over 1,000 organic system plants.
But there's a worldwide shortage of fish this
summer when people were really, for fertilizer
because most of it goes into fish meal to feed
farmed fish. And the suppliers were scrambling
around to find enough supply. Harold?

    MEMBER AUSTIN: Thanks. Yes, it's in
the northwest it's used quite a bit as well, both
on full-ear and out on the ground, and I think by
the quest to gather more information, to look down
the road at this material, I think shows that we're
hearing the public comment, we're seeing the
concerns, but we're also addressing the fact that
this is a widely used material that organic growers
have and handlers have developed their businesses
as part of their tools. And so I think looking
further at this I think it's imperative that we have
to do that. And I think this is the right approach
to take.

MEMBER SONNABEND: Tom?

MEMBER CHAPMAN: I have a question for
my colleagues, probably mostly the ones that sit
on both the handling and the crops committees. But
in the handling committee there were several issues
raised related to environmental concerns of fish
harvesting. I wanted to know or understand how
that's different than here, since that's not been
discussed in detail.

MEMBER SONNABEND: You mumbled at the
end. Could you review that last --

MEMBER CHAPMAN: How that's different
than the fish products used for crop production
since that wasn't given in much detail.

MEMBER SONNABEND: What do you mean,
different?

MEMBER CHAPMAN: Are there any
difference in the environmental concerns between
the fish products used for human consumption and
the fish products used for crop production?

MEMBER SONNABEND: Yes, there are a number of differences. As we heard in the fish oil, it's strictly byproduct of certain species that are caught for other purposes or caught in nets when they're trying to get other fish.

And fish for fertilizer, it's a different type of byproducts. Often it's the byproduct after they're getting the fish ready for human consumption and then they have the heads and the tails and the bones and everything. And then they ferment that or hydrolysis that.

There is some amount of catching fish specifically for fish fertilizer, but much less prevalent than for fish oil. And they are fairly different set of things to look at. I mean, there are similarities of course, but there's differences.

MEMBER CHAPMAN: Can I follow up with you? So if I understand it, they're both byproducts from the fishing industry?

MEMBER SONNABEND: Not exclusively in
the case of fish fertilizers. I believe that there are some, you know, like, anchovies and the lower food chain levels of fish that might be caught to make more fertilizer, but I'm not positive about that which is why we would need a TR. Jean?

CHAIR RICHARDSON: So while I will be voting in favor of this, I do so with extreme reluctance and in anticipation of us being able to come up with some good information in the next few months which will allow us if necessary to readdress this in some form or other, whether it's an annotation or a petition to do something else, I don't know. But I just want you to know that prior to my vote here.

MEMBER SONNABEND: Lisa?

MEMBER DE LIMA: I just want to put out there that I'm in the same boat as Tracy and Madam Chair, that I'm very uncomfortable with this, but I'm going to vote for now to keep it on the list until we get more information.

CHAIR RICHARDSON: It looks like we've finished discussion on this matter. All those in
favor of removing liquid fish products as plant or soil amendments, et cetera, from the National List, please raise your hand. Those opposed to removing the liquid fish products from the National List, please raise your hand. Any abstentions, recusals? And I note no absences. Thank you.

VICE CHAIR FAVRE: Vote was one yes, thirteen no, motion fails.

MEMBER SONNABEND: We are on to vitamin B1, C, and E which we will take together. Lisa?

DR. BRINES: Thank you. These substances are included at Section 205.601 of the National List, Paragraph J as plant or soil Amendment 8, vitamins E1, C, and E. Thank you.

MEMBER BECK: So there was some public comment support in favor of relisting vitamins B1, C, and E. These vitamins are in use by the trade and continue to be considered necessary to production of fruit and vegetables. The subcommittee requested a TR but it was not issued until after our proposals were posted. To date, the TR has not been reviewed or accepted by the
MEMBER SONNABEND: Discussion? I will just say that this is one, the uses of these things are not -- they're transparent. And of the three, the most widely used by far is the tocopherols Vitamin D as a stabilizer and other microbial products and blended products. And so it's there in dozens and dozens of OMRI products if not more than dozens. But you don't see it on the surface because it's not something that anyone just goes out and applies by itself.

CHAIR RICHARDSON: I'm seeing no discussion, so we'll move to a vote. Those who wish to remove vitamins B1, C, and E from that National List, please raise your hand. Those opposed to removal of vitamin B1, C, and E from the National List, please raise your hand. Any abstentions, recusals? And no absences, thank you.

VICE CHAIR FAVRE: For which?

MEMBER SONNABEND: Keeping it on the list. Yes.
VICE CHAIR FAVRE: Vote is one yes, thirteen no, the motion fails.

MEMBER SONNABEND: Now I'm sure everyone has been waiting for ethylene gas. Lisa?

DR. BRINES: Thank you. This substance is included at Section 205.601 of the National List at Paragraph K as plant growth regulators, ethylene gas for regulation of pineapple flowering. Thank you.

MEMBER AUSTIN: Oh boy, here we go. Okay, during our first public comment period for ethylene, there were five comments submitted. Most in favor, those opposed bringing the issue that material was used primarily by larger growers while smaller growers we didn't hear from and they don't rely upon it. So they question the necessity of it. There were no human health or environmental issues or concerns that were brought to the subcommittee during this sunset review cycle that had not been previously discussed and addressed in previous sunset reviews.

Following the La Hoya meeting, the
subcommittee, during our discussions and stuff, we were still concerned about the lack of actual stakeholder crop producer responses. We didn't feel like we heard back from the growers. Did they still find this to be necessary to production? Have they done work with the alternatives, and were those viable? So during this cycle, the second posting for public comment, we've heard that first of all that those growers hadn't heard about the first posting for public comment.

We got 42 comments in response this time, most favorable for relisting. They pointed out that the lack of participation was from a lack of communication and their not knowing it. There were two public interest groups that were opposed to the relisting. Comments showed wide range of grower sizes from small to large growers that actually use this material. We heard that the last day and a half in oral comments substantiating that.

We've received a petition today, plus there were also comments in the written public
comments about that co-op and the petition to keep
this material listed. Okay, one of the comments
or one of the concerns in the past has been about
alternatives: were there any, have they been looked
at? We've received multiple comments back that
they have looked at alternatives. The
alternatives have not been working for them.

OPWC also included in their comments
that there was one trial showing three five acre
farms that attempted to farm pineapples without
ethylene and they failed from a commercial
standpoint. So we had an overwhelming show of
support this round of the public comments coming
out. Like I said, we had 43 comments this period,
42 comments this period, and what did we hear from
them?

We heard from 30 organic producers with
written comments, 4 manufacturers, 3 organic
stakeholders that were all in support. And we
heard from the ten oral testimonies in the last day
and a half showing how important it was and that
without this material staying on the National List,
that it would pretty much mean the end to the organic pineapple production in Costa Rica.

MEMBER SONNABEND: Thank you.

Discussion? Francis?

MEMBER AUSTIN: I would like to make the first comment on the lighter side. The observation that Harold looks like he's up in the sky booth calling the football game. Thanks to Nick for that.

(Laughter.)

MEMBER SONNABEND: Discussion? Nick?

MEMBER MARAVELL: Yes, this is for both Harold and Colehour. We know that what the situation is from the Costa Rican growers. Did we hear from growers from any other countries, including the United States, that had a different message or didn't have a message at all? In other words, do you feel we've heard from everybody that is affected? I know that Costa Rica is probably the largest producer that's concerned here with the U.S. market. But what have we heard from other producers in other countries?
MEMBER AUSTIN: The only other comment, Nick, that we heard back was from one consulting doing, and he didn't specify which other countries. But he did say that it was used elsewhere. But we didn't get any specifics on that.

MEMBER SONNABEND: Harold, we did hear from one in Mexico, the one you just cited with the trial. That was in Mexico.

MEMBER AUSTIN: Yes. Okay, so we had two comments back.

MEMBER SONNABEND: Colehour?

MEMBER BONDERA: Yes, I can respond to that in terms of at the subcommittee level I did state that I do grow pineapples on my farm in Hawaii. And if you are direct marketing the pineapples, especially if you're small scale and you're not trying to export them, that, essentially, I have plenty of myself and plenty of neighbors in Hawaii who do not use ethylene gas. So we did discuss that at the subcommittee level. It wasn't testimony, it was discussion.
MEMBER SONNABEND: I'll call on myself. Nick, in answer to your question and also to address another point that I think this situation raised. When this was originally put on the National List ten years ago I believe, or longer, 2001, we did not have verbal comments from anyone flying up to speak to us in oral comment.

But we received written comments from a number of other countries, mostly South American countries, rather than other pineapple growing regions, which are extensive in places like India and the Philippines, and I think Malaysia or Indonesia, you know, some Asian countries because those do not typically go to the United States, whereas the South American ones do.

And we did get statistics, both verbally where the gentleman said Costa Rica supplies 98 percent of U.S. pineapples, and in written comment there was one that fed 83 percent of U.S. pineapples and named Mexico, Guatemala, and one or two other South American countries as the balance.
What this leads, what the problem leads to is that when Harold and anyone else goes to research the public comment record from those days, all that is really available is the transcript of the meeting. And if nobody showed, because it was before the days of regulations.gov, and so written comments came in and they were available for people to see at the time, but finding them now would be, like, totally impossible.

So the transcript of the meeting only discussed what happened in general terms and the issues, but didn't say we got 14 comments from this country and, you know, this many comments from the other. So this is something that we hope to correct for future boards because it has been very difficult on a few of these things where issues were well aired in the past, but we don't have access to that.

And so the fact that people came verbally and it's in the transcript was very helpful. Harold summarizing the exact numbers of comments we got was very helpful. And because none
of this information we received was in the original posting, we'll prepare a cover sheet. The post meeting cover sheet will summarize some of the input that we heard during the meeting so that the future Board and members of the public who wish to look back on it have a better documentation of what happened.

MEMBER MARAVELL: Thank you, Zea, for that.

MEMBER SONNABEND: Colehour?

MEMBER BONDERA: Yes, I want to take a few minutes of our time to put in the record a slightly different set of perspectives on this topic of ethylene gas and pineapples than has been presented. And I honestly do not think that somebody could argue that I could have or should have asked these as questions to the people while they were testifying. But honestly, I think it's more perspective than question/answers.

And I just want to talk about organics for a second and think about creating an organic system that's reliant on a synthetic and how, from
my perspective and experience, that's not my role or goal and sitting here on the NOSB. That's something I'm trying to, I mean, that's one of the reasons that we have Sunset, but if you read off, but you don't want to be dependent upon a synthetic.

And I think that frankly and truthfully, I live in Hawaii. And where did Dole have their pineapple production 20 years ago? It wasn't in Costa Rica. Not at all. If you listen to the testimony and you listen to the numbers of years that those people were talking about, not one of them mentioned any 20 years ago. There was no organic pineapple or export industry in the country of Costa Rica 20 years ago.

Dole, the company, moved it from Hawaii where they had all of their, they're called plantations in the State of Hawaii, operations, producing pineapples, organic pineapples and otherwise from Hawaii because it was too costly for the company, Dole, to Costa Rica. That is what happened. I'm speaking about reality, not my opinion. And all of those people who worked for
those all went out of work. So if we're considering
the impacts on families and the impacts on people,
it all happened in the State of Hawaii.

And they all moved to, it all got moved
to Costa Rica. And I think that that dependency
on a market, which is the United States depending
on organic pineapples being imported into the
country from Costa Rica which, like I just said and
it's the truth, I'm not hypothesizing, moves when
they aren't making enough money, then what's going
to happen to those people who've become dependent
on it in the country of Costa Rica, which I
understand these people are still here right now
listening to me, and we heard their testimony,
they're relying on this, will we destroy them?

No, but will a company that moves
destroy them? So I want us to think about that
dependency issue, but I also want us to think about
what we saw in some of those pictures because I
think that was critical.

That was monoculture. And I
understand organic systems very well. I live in
one and I work in them and I do things in them. Organic systems aren't about monoculture. But what we saw in those pictures was monoculture, and that's the system that's not just created, but these families are dependent on.

And I'm going to wrap up in a second, but I just want to make a couple more quick comments. I already mentioned the fact that small scale direct operators which primarily isn't what's happening in Costa Rica pineapple production, like me, for example, I'm direct selling my pineapples. I don't need them at one time to go on a container to be shipped somewhere. And so I think that these factors relate to the concept of seasons.

I grew up on a farm in Oregon. We had seasons. I live in Hawaii, we have different seasons, just like in Costa Rica. We have two seasons, not four. We have rainy and wet season. But realistically and honestly, organics is trying to imitate conventional and it's trying to say all products that you want are available 24/7 around
the world. And organics needs to really look to be unique and different and stand out from conventional, not just imitate the systems that are in place.

And I think that we don't need to be relying on imitation and people making a little bit more money, that's not our goal or our role. I'm not concerned. Sitting on the NOSB, I'm not worried about how much money is being made. That's not one of our decision factors.

And I really think that for that reason, even though I already know that I will not, my vote will not be the end of the day, the result, I'm not going to vote in support of continuing relying on ethylene gas for inducing the flowers of pineapples so that they can be more easily exported by these companies to the stores, so they could be distributed to people instead of having them rely on more seasonality and functionality, and/or to wrap it up, to be paying those people in Costa Rica more money for more work to be managing those pineapples on the ground and the company not making
as much profit.

So I just want to put those thoughts out there because they are reality, and they I think really should be affecting our decisions about this kind of question. Thank you.

MEMBER SONNABEND: Francis and then Nick.

MEMBER THICKE: I just want to explain why I'm going to abstain, because I don't want to vote against all these people whose livelihood we heard about, depends upon it, but I can't really vote for this kind of a system that depends so heavily on growth regulators to produce that kind of -- I think it's against organic principals.

MEMBER MARAVELL: I want to echo what Colehour and Francis just said, and I will probably abstain as well. This, in my opinion, is creature, if you will, that we created here at the NOSB. Not us personally, but previous NOSB Boards.

And there are a lot of these things that seem like it was a good idea at the time. However, this is also a situation where I would strongly
advocate for a time limit on this because I don't see, if we would seriously ever want to consider breaking this cycle and having a production system that is more compatible with organic principals, then we should phase it out. And this would be, in my opinion, an excellent example of where a time limitation would be called for.

CHAIR RICHARDSON: Yes, I think this is actually a very difficult one to vote on. I agree completely with what Colehour said. And I also would express my serious concern about monoculture, monoculture everywhere, and especially when I look and remember Costa Rica from 40 and 50 years ago.

Monoculture isn't good, we all know that. We absolutely know that, and yet we, as Nick said, have created a situation in Costa Rica where monoculture and the demands of whoever it is, Whole Foods, you name it, any of the big distribution companies, they want those pineapples all at once at a certain time. So we're part of a global system, and this is placed unusual and unfortunate
pressure, I think, on organic producers as well as conventional producers.

So I will be voting to keep the ethylene because, you know, we've all got us into this position. It's not a single person that's done this. They didn't do this thing out of vindictiveness. I believe that the test would be that yes, this is necessary as a way for the organic farmers to produce this commodity. But it's a commodity based approach, it's not an ecosystem approach.

And I would like our colleagues and friends who so thoughtfully came from Costa Rica who are still presently here in the room to hear the message that we believe, I should speak for myself, I believe that we should be as organic certifiers and inspectors going out onto these farms, be looking for the necessary bio-diversity which is absolutely critical for the long term sustainability of all of the agroecology ecosystems that we should be looking at when we do our organic certification.
And this would give us an almost classic situation that we have developed here in Costa Rica over the last very few years to have the systems that we have here in place. But in the meanwhile, I will vote for the ethylene to remain as it is.

MEMBER SONNABEND: Okay, I'm going to call on myself, and then Harold I believe had his hand up. I do think that those people who are interested in getting this off the list in the future should learn a lesson that we learned from how painful it was with tetracycline, and not put the cart before the horse, and immediately call on the trade and call on the research community by putting this on our research priorities for the future so that the research needs can be articulated and the research kicked off.

We didn't hear anything in the testimony about alternatives that seem to have any viability whatsoever. And that investigation needs to start right away if this is going to come off. And so being we're so not there yet, I don't see a time limit as appropriate for this time. But
hopefully in five years, we could be further along
with a research on the alternatives to that. Okay,
Harold?

MEMBER AUSTIN: Okay. Thanks, Zea. I think one of the things I would like to point out
is that 20 years ago NOFA was just becoming into
place, the National List was just becoming to be
outlined, and there was some pretty organic savvy
people 20 years ago that were helping to put all
of this into place, and there's a reason why.

They were looking to the future of what
organics, not was at that moment but what organics
potentially had the ability to become. While I
agree with some of Colehour's comments that we have
to look at the means and the wet methods that
they're using to farm these things, I think we have
to also look at the diversity which now represents
what organic production, organic handling, organic
sales are all about, and that is there are those
farmstead type of sales.

But there's also that commercial viable
side that we have to rely on that the consumers have
grown to become accustomed to. They want to see a supply, they want to see pineapples that are available for processing, they want to see pineapples that are available at specific times of the year. There's a lot of people besides these growers in Costa Rica that our decisions will impact in a negative way if we de-list this material. So I think we're taking a practical approach.

I think looking for this as a research priority down the road I think makes absolute sense, and I think we all agree that we didn't like some of the pictures that we saw. I'm completely right there with everybody else. But I also think we have to understand, organics today is not what organics was 20 years ago. And I think we will better serve the organic community if we remember to keep that in front of us and not try to live 20 years in the past, but live for the future and where organics potentially could go. And this is a great material that we could use to try to use as a catalyst to take us to that next step.
MEMBER SONNABEND: Tracy?

VICE CHAIR FAVRE: I would like to appreciate, say I appreciate the comments from my colleagues here on the Board. Colehour in particular, I thought your comments were cogent and articulate, and I appreciate the perspective that you have particularly living on Hawaii and recognizing the history that sort of led to this situation. This is a struggle. This is a tough one because we're trying to balance principals versus livelihoods and this is where it gets always sticky.

I actually am glad to hear Zea articulate the need to get it on a research priority, because I think that's probably going to be the most socially responsible and humane, if you will, move us out of this problem. And so I will vote to support relisting this material, but would like to see us find an equitable way to phase it out.

MEMBER SONNABEND: Discussion, any further? Nick?
MEMBER MARAVELL: Yes. I mean, streptomycin and tetracycline, we did have deadlines, we did extend them with an eye on the research activity. And I'm just saying that I think this bill is a good candidate for moving in that way. But that's just my opinion.

MEMBER SONNABEND: Anyone else? Jennifer?

MEMBER TAYLOR: I wonder if the consumers, folks that are really, you know, enjoying their organic pineapples, if they knew that their pineapples were put under an ethylene gas environment to enhance ripening, how fast would they buy it, or how fast would they actually want it, how fast would they want to give it to their children? So I think that's something that we need to consider too as we consider other information.

MEMBER SONNABEND: More discussion? Okay, I think we're ready to vote.

CHAIR RICHARDSON: Okay, ready to vote? Is there any request for a roll call or do we just, are we happy with the show of hands? Yes
it goes, okay. All those in favor of removing ethylene gas as described from the National List, please raise your hand. All those opposed to removing ethylene gas from the National List, please raise your hand. Abstentions? Recusals? And I note no absences.

VICE CHAIR FAVRE: We have three yes, nine no, two abstentions, the motion fails.

MEMBER SONNABEND: Next is sodium silicate.

DR. BRINES: Thanks. Sodium silicate is included at Section 205.601 of the National List at Paragraph L as floating agents in post-harvest handling, two sodium silicate for tree fruit and fiber processing. And one correction for the record, the citation in the subcommittee vote motion should read as 205.601(l) rather than 205.601(j). Thank you.

MEMBER BECK: So the subcommittee proposed to de-list sodium silicate as a floating agent in post-harvest handling for tree fruit and fiber processing primarily because there was no
public comment received in favor of this material during our spring 2015 meeting. Additionally, float list mechanized systems were noted as an alternative. However, for our current meeting we did receive two comments discussing sodium silicate.

One commenter supports relisting for use as a pear float. The commenter stated that removal will prevent small business from converting to organic packing due to the high cost of equipment to do it without. Additionally, the OTA mentions that they conducted direct outreach to suppliers of sodium silicate for pear floating agents. They state the following.

It appears as though the material is still in use by some smaller conventional pear packing facilities in the Pacific Northwest. These facilities have switched to sodium silicate due to increased regulation on the use of lignin sulfonate. Removing sodium silicate at this time would eliminate the possibility of these smaller facilities with older style packing lines in
engaging in the organic industry.

The Board needs to consider the potential impact on smaller packing facilities should both lignin sulfonate and sodium silicate be removed from the National List for use as a pear floating agent. This material could still be in use by the trade and therefore continues to be considered necessary.

MEMBER SONNABEND: Discussion? Colehour?

MEMBER BONDERA: Carmela, in that what you just read, did it say in the first little clause conventional operations? Is that right? That's what I heard you say, and it's hypothetically or potentially could be used by organic but it specifically says conventional small packing facility?

MEMBER BECK: Correct.

MEMBER SONNABEND: We did hear from one organic pear grower or packer who used it, which means there probably are more out there. Jean, did you have your hand up?
CHAIR RICHARDSON: Yes, I'm not clear why the subcommittee when, it reviewed this, why they voted unanimously apparently to remove, that would be their recommendation. It's still not clear to me. You list compatibility with organic agriculture, I would appreciate a bit more specificity.

MEMBER SONNABEND: You want to address that?

MEMBER BECK: I mean, my understanding was again, there was no public comment in favor, and so there was an understanding that it was no longer needed by industry.

MEMBER SONNABEND: Similar to ethylene. Tom?

MEMBER CHAPMAN: I think we also received six checklists from farmers that said they use the material. I said I think we also received six checklists from farmers saying they use the material.

MEMBER SONNABEND: Harold?

MEMBER AUSTIN: Yes, I originally
voted against, you know, I was in favor of the
subcommittee proposal to remove this from the
National List. Our basis there was that it was no
longer needed, just similar to the sulfonate, that
it wasn't a need. The packers weren't using it
anymore. But evidently there are still some
smaller processors that are still using this
material.

They switched from the lignin sulfonate
over to this. So I'm going to change my vote and
I'm going to vote in favor of keeping this one on
the list for the time being.

MEMBER SONNABEND: Jean?

CHAIR RICHARDSON: So crop
subcommittee folks, you've listened to me why not
about lignin sulfonate which I voted against
earlier. This one does not appear to have the same
type of negative impact on the organic system plan
as lignin sulfonate would do in my mind. And is
that what you found, that it was just simply the
fact that you hadn't got enough feedback from
enough growers to determine if it was really
needed? Did it meet the OFPA criteria?

MEMBER SONNABEND: Yes. Personally, I didn't see any issues with it. It was just a question of lack of public comment. And I, like Harold, am going to change my vote to renew it because I feel like it will put small growers at a disadvantage to the larger growers. And I feel like that's something we shouldn't do without more opportunity for input. And I do also want to point out that one of its uses is in fiber processing, and we didn't hear from that community either, but we may be cutting out a whole use that people just were not aware of was up for Sunset in fiber processing. So I'm changing my vote as well as Harold.

CHAIR RICHARDSON: Seeing no more discussion, I believe we're ready for the vote. All those in favor of removing sodium silicate as a floatation agent for tree fruit and fiber processing, please raise your hand. All those opposed to removing this material from the National List, please raise your hand. Any abstentions or
recusals? And I note no absences.

VICE CHAIR FAVRE: That was two yes, twelve no, the motion fails.

MEMBER SONNABEND: 5:15 and we're on to that very juicy subject of EPA list for inerts. Lisa?

DR. BRINES: Thank you. And my understanding is that the Board will take up both listings at 205.601 for crop use as well as 205.601 for livestock use at the same time.

MEMBER SONNABEND: Okay.

DR. BRINES: Heads nod for the record.

All right. The current listing at 205.601(m) reads as follows, as synthetic inert ingredients as classified by the Environmental Protection Agency for use with non-synthetic substances or as synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitation on the use of such substances, one EPA list four inerts of minimal concern. Thank you.

MEMBER SONNABEND: Okay. I guess I'll
take the lead from crops and present this, and then whoever is the lead in livestock could supplement what I say. Well, as you know, it's been some years now since the EPA came to us and said that List 4 was no longer in use and therefore the citation in the federal rule needed to be changed. And we've been working on it ever since, or not always me but the Board has been working on it ever since along with the department.

We have come to a solution that we feel is achievable from all of the interested government agencies, as well as the Board members who have worked on it which is to work with the EPA Safer Choice program formerly known as Design for Environment. We need to have a vote on the relationship before anything further can happen. With the next steps, as I outlined in the report, we can't have an MOU with the Safer Choice program until it's voted on by the NOSB.

We can't do the data call in for federal register notice until it's voted on by the NOSB. And so we decided to go ahead and try and pose the
annotation change for this meeting because so many people complained about the delay which is, it's been delayed for years now. And while we do have the option and I would like to hear in discussion if people want to delay this even further and take the annotation change back for future work, even though we will fully discuss it tomorrow.

But there is a chance that we may withdraw it or table it, I mean not tomorrow, Thursday, we may withdraw it or table it. And I would like to be informed on people's thinking towards that decision if it needs so much more work before going forward.

Keeping in mind that we did put it forward without all the exact procedural details being worked out because some of those can't be worked out until the MOU is signed. And secondly, the time line can't get more specific until the MOU is signed.

But the issue of how much oversight the NOSB has over the process and how the items that are reviewed will be referenced on their list
because we have discussed, you know, having an asterisk type symbol, or possibly a separate section of their list, or these type of procedural details, we decided to go through it forward with a proposal for an annotation change before this is fully worked out because that's what the department needed to have happen in order to get the ball rolling to do this.

So I've been assured by the department that nothing will happen on this for six months if we do retract it, except we might do a little more talking about it. But we won't start the program. So in the meantime, we do need to renew the EPA list for inert listing while we figure out exactly how the new program will be crafted. And that's what the motion is before us.

Just as an aside, I should mention the NPE is in the last paragraph I included here. I had ready to go and voted on by the committee a discussion document concerning the time line and intention to phase out the NPEs, to go forward at this meeting.
However, it was not accepted to go forward by the NOP because the agenda was so full here, and you can see that we're having to rush through a number of materials and issues and we felt we should devote more time to it.

But because this is inevitably going to come to pass, I put it in the main proposal that it's a good time to start reformulating now because it is eventually going to come to pass, very likely, since the Safer Choice program has already told us that they will not have the NPEs on their list, and yet we do want these things to -- the companies that use them to have time to reformulate them.

So I guess that's what I have to say for now. We can talk a lot more about the annotation on Thursday, but I would like people's initial thoughts and discussions on this. First Tracy or whoever livestock wants to add.

VICE CHAIR FAVRE: Yes, actually your discussion very much paralleled the discussion that we had in livestock. Thank you for your work on developing this proposal and giving us at least
a springboard to start from. The livestock committee is in agreement that this is the best way to address the list for inerts going forward. And in fact, we were kind of stymied on how to move forward prior to this proposal because it is such a big elephant to eat. So we did support and sign on and vote on the proposal as put forward by the crops committee.

MEMBER SONNABEND: Discussion? Jean?

CHAIR RICHARDSON: Yes, Tracy, do you have any feeling as to whether or not we have, should we wait for Thursday to have the discussion on the proposed annotation change, or do we have any, I mean, do we have all the language that we need that we think for that or should we just wait?

VICE CHAIR FAVRE: You mean wait from today until Thursday or what?

CHAIR RICHARDSON: No, I mean, we're going to vote on sunset today. But Zea was looking for some indication as to whether or not we need to have some preliminary discussions as to whether we're going to be having enough language to do the
MEMBER SONNABEND: I mean, I'm comfortable with moving forward the annotation change because I have confidence that we, along with the inerts working group, can work out a procedure, the procedural aspects which will include sufficient NOSB oversight and reporting to the NOSB and include a time line that's realistic and works for industry members and public interest stakeholders.

Other people do not have confidence in us to do that, as we've heard from the public. And so if some of those are sitting here on the Board and feel like it should be delayed while we work out some of the finer points, then that's fine. It's very unlikely to come back as a proposal to go back to the 2012 recommendation.

VICE CHAIR FAVRE: I'll only add that in our discussions, we did recognize that there were details to be worked out. But, you know, like Zea said in her discussion, some of the details literally can't be worked out until you move it
forward.

So without having the proposal in place, I think we're just delaying the inevitable, and some of the details are just inevitably going to have to be worked out as the process moves forward. And in our discussion, we did have some concerns about how do we ensure that, but I think that from my remembrance and from my personal perspective, I have confidence that we could put some safeguards in place to make sure that oversight is sufficient.

MEMBER SONNABEND: Anyone else have discussion points to raise? Francis?

MEMBER THICKE: I do have some concerns after hearing the comments in the last few days. But I think we should just move ahead with this sunset proposal now and wait for this kind of stuff until later when we have that come up.

MEMBER BONDERA: Anyone else? Colehour?

MEMBER BONDERA: Yes. I just want to ask you to clarify because I'm 99 percent sure I
understand, but I would rather be 100 percent. There's two different, two separate things to be considering.

One is a sunset vote which is scheduled for today, and one is an annotation change on this which has been scheduled for Thursday. They're separate items and there's been some discussion about combining it or did we decide today? And I personally think that we need to keep them very separate, honestly. And I think how that annotation change discussion goes, you know, how fast we get through that I think should be a different thing to address. Thank you.

MEMBER SONNABEND: Okay. They are very separate and the votes will be two different days, but certain people are understandably uncomfortable renewing the terminology of EPA List 4, and so I just want to make it clear that we're trying to go forward at the same time that we are.

CHAIR RICHARDSON: Seeing no more discussion, I would ask those of you who are in favor of the motion to remove the EPA List 4 inerts
of minimal concern from the National List, please raise your hand. All those opposed to removing the EPA list for inerts of minimal concern from the National List, please raise your hand. Any abstentions or recusals? And no absences. Thank you.

VICE CHAIR FAVRE: That was two yes, twelve no. The motion fails.

MEMBER SONNABEND: The last one on 601 is microcrystalline cheese wax. Lisa?

DR. BRINES: Thank you. This substance is included at Section 205.601 of the National List under Paragraph O as production aids, microcrystalline cheese wax, cast numbers 64742-42-3, 8009-03-08, and 8002-74-2 for use in log grown mushroom production, must be used without either ethylene propylene copolymer or synthetic colors. Thank you.

MEMBER SONNABEND: Colehour?

MEMBER BONDERA: Thank you. Like Lisa said, it's used in log grown mushroom production. There is a non-GMO soy alternative wax that I can't
tell you when, or if, or how it will be available,
but I think that that's been some of the discussion
in terms of, you know, maybe we can de-list this
microcrystalline cheese wax because of that.

It seems like, to me at least, it's
unclear that the sufficient availability. There
wasn't a lot of public comment. We had a little
bit. There was some, one comment, and I'm not
quoting it, but I remember reading it I think about
the soil one's already available. So I think that
adds to the confusion from my perspective,
especially when hearing mushroom testimony that,
you know, there isn't another, we need to stick with
this possibility.

Public comment was mostly in support of
relisting. At the subcommittee level the vote was
divided with abstentions and yeses and nos and
absences, almost fleshing out the number of people
when we took that vote. So it's not a clear, simple
topic to really anybody, but I think frankly that's
because not many of us are dealing with mushrooms,
honestly. But that's all I needed to say. Thank
you.

MEMBER SONNABEND: I'll call on myself first. One public comment I clearly heard today was that the soy wax contains, has been determined by a certifier to be synthetic, and that clearly means that it would need to be petitioned. And so we couldn't just vote this off and have it be used. It would have to be petitioned and added first. Other discussion?

CHAIR RICHARDSON: There being no discussion, I would ask you, for those members who would like to remove microcrystalline cheese wax from the National List, please raise your hand. For those who would like the microcrystalline cheese wax to remain on the National List, please raise your hand. Any abstentions or recusals? No absences noted.

VICE CHAIR FAVRE: The vote was one yes, thirteen no. The motion fails.

CHAIR RICHARDSON: The next group of materials we're going to look at, Zea, the 205.602 materials. I would like to ask perhaps that the
chair takes these as a group and acts as the lead person. Would that be possible, or do you want to take every single one of them separately?

MEMBER SONNABEND: What did you say?

That the lead people, to just do them all at once?

CHAIR RICHARDSON: Do them all at once, but --

MEMBER SONNABEND: But have one person lead them all?

CHAIR RICHARDSON: -- they have different lead people.

MEMBER SONNABEND: Yes.

CHAIR RICHARDSON: So how would you like to do that as a chair?

MEMBER SONNABEND: Well, I'm willing to propose doing them all at once, have Lisa read them all at once, and then ask the will of the Board if they want to pull one off separately and if not, do them all at once. How does that sound? Lisa, 205.602.

DR. BRINES: All right. I will read all seven substances that are under consideration
for Sunset 2017 under Section 205.602, non-synthetic substances prohibited for use in organic crop production. We have A, ash from manure burning, B arsenic, D lead salts, E potassium chloride unless derived from a mine source and applied in a manner that minimizes chloride accumulation in the soil, F sodium fluoaluminate mined, H strychnine, and finally I tobacco dust, nicotine sulfate. Thank you.

MEMBER SONNABEND: Okay. At the outset of this I just want to make it very clear to everybody that if you vote yes on removing these, then they become allowed. If you want to keep them prohibited, which they're on the prohibited list, you vote no. Okay? It's a little backwards.

Next I will ask if anyone wants to single out any one of these to be dealt with separately. Okay, none. Hearing that, then I'll ask if anyone has any discussion points on any of the seven items that are proposed on 205.602.

Colehour, you want to say something? Yes.

MEMBER BONDERA: Yes, sorry. Thank
you for waiting. I apologize. One of those is one that I was lead on, and I just want to comment about it very briefly. I don't think we need to go anywhere with it but it's ash from manure burning. And the reason I want to comment on it is because we are also considering a petition to, which we're not going to consider at this meeting, to add ash from manure burning to the list.

And I just wanted to make people aware that that is a topic that's going to be coming up. That is a material that is going to be coming up again for consideration in the future. That's my only comment. Thank you.

MEMBER SONNABEND: Any discussion on any of the other materials in this group?

CHAIR RICHARDSON: Okay, it looks like we are ready for the final vote of the day, and that is to vote on a list of the 205.602 prohibited non-synthetic substances, ash from manure burning, arsenic, lead salts, potassium chloride, sodium fluoaluminate, strychnine, tobacco dust.

If you would like, let's see, if you
want to remove these prohibited substances from the National List, please raise your hand. If you want to leave these materials on the National List as prohibited substances, please raise your hand. Are there any abstentions or recusals? And no absences noted. Thank you.

VICE CHAIR FAVRE: The vote was zero yes, fourteen no, the motion fails.

MEMBER SONNABEND: This concludes the crop subcommittee Sunset 2017 portion of the agenda.

CHAIR RICHARDSON: Well done, everybody. Thank you ever so much. You did a terrific job. We will meet here again tomorrow morning at 8:30 promptly and start then. You're all cordially invited together with your wives, children, and associated significant others and friends to come to a jolly good party which will start shortly after 6 o'clock in the atrium here in the resort.

(Whereupon, the above-entitled meeting went off the record at 5:34 p.m.)
The Board met in the Pinnacle Room of the Stoweflake Conference Center, Stowe, Vermont, at 8:30 a.m., Jean Richardson, Chair, presiding.

PRESENT

JEAN RICHARDSON, Chair
TRACY FAVRE, Vice Chair
HAROLD AUSTIN, Secretary (via Skype)
CARMELA BECK
COLEHOUR BONDERA
TOM CHAPMAN
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, National Organic Program

LISA BRINES, National List Manager, National Organic Program

EMILY BROWN ROSEN, Agricultural Marketing Specialist, National Organic Program

PAUL LEWIS, Director, Standards Division, National Organic Program, USDA

SAM JONES, AMS Public Affairs Specialist

MILES MEVOY, Designated Federal Officer, Deputy Administrator, National Organic Program
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Adjourn
8:33 a.m.

CHAIR RICHARDSON: Okay. It's just a couple of minutes after 8:30, and we'd like to get this exciting day started. This is Tom's day today. He's been looking forward to this for weeks, haven't you, Tom? So just remember to keep your voice close to the microphone -- you have a sweet voice, not like mine -- so that people can follow along. And we're going to deal with all of the sunset handling materials today. We'll take a break after a couple of hours of work. All right, Tom?

MEMBER CHAPMAN: Thank you, Madam Chair. I hope I can run this meeting as efficiently and effectively as you have. I'm told if I get done by 3 p.m. we get free seeds from High Mowing, and if we get done by 4 p.m. happy hour is on Jean. Sorry, Harold. I think that's 1 p.m. your time, but it's happy hour somewhere.

So we have over a hundred materials to vote on the sunset. The Handling Committee has
done a herculean job at reviewing and analyzing these materials that are 106 pages of proposals. This speaks to the NOSB members' dedication to the organic community and the review process set forth by OFPA. It was an unfair task, but it was answered. And I do implore the program to work with the NOSB to better split up materials in future years.

Despite all this work, we have asked lead reviewers to keep their reviews brief and concise. If material garners greater discussion than anticipated, I may call upon the lead reviewer to provide a more complete synopsis. I will start at 205.605(a) and proceed to 605(b) and conclude with 606. Any questions from the Board at this time? Seeing none, we'll get started. Dr. Brines, will you start with alginic acid?

DR. BRINES: Yes, thank you. The following material is listed at Section 205.605 of the National List, nonagricultural, non-organic substances allowed as ingredients in or on processed products labeled as organic or made with
organic-specified ingredients or food groups under (a), non-synthetics allowed. I'll read the full listing, but the first proposal is just for alginic acid. The full listing reads as acids, alginic, citric, produced by microbial fermentation of carbohydrate substances, and lactic.

MEMBER CHAPMAN: Thank you. Tracy?

VICE CHAIR FAVRE: Thanks, Tom. Good morning, everybody. Alginic acid is derived from harvested wild seaweeds. Public comment was mixed about alginic acid. Those in favor of its re-listing note its long history of use with no ill effects on either human digestion or on the ecosystem due to sustainable harvesting, and assert that the properties imparted by alginic acid are central for some processed food formulations.

Those opposed expressed concerns regarding the concentration of heavy metals in the wild harvested seaweed and the fact that alginic acid is used primarily to enhance texture in foods and is, therefore, not compatible with OFPA criteria. We did come to the conclusion in the
Handling Subcommittee, after looking at the draft classification of materials, that we are recommending an additional proposal for alginic acid to reclassify it to 205.605(d). Thank you.

MEMBER CHAPMAN: Thank you, Tracy.

Any discussion from the Board at this time? Jean?

CHAIR RICHARDSON: Tracy, yesterday we had discussions on the aspects of alginic acid, for example, that deal with ground seaweed. Did you get much comment relative to whether or not we should be having concerns about the seaweed?

VICE CHAIR FAVRE: You mean in regards to over-harvesting?

CHAIR RICHARDSON: Yes.

MEMBER SWAFFAR: Yes. We did, actually, have comments, both in regards to over-harvesting and the possible ecosystem degradation that were raised as issues of concern. Additionally, as we were discussing yesterday, several of us have expressed a need to look at some of the sea products in a more systems-based fashion. And while we'll have our vote on sunset
today, we'll probably have continued discussions about sea products going forward.

CHAIR RICHARDSON: So did this, in any way, impact your -- in subcommittee, it was voted on by everybody, one was absent, to retain it on the list. Did your new information that you got in since the last period suggest that you might change your position on this?

MEMBER SWAFFAR: Me personally?

CHAIR RICHARDSON: Your analysis.

MEMBER SWAFFAR: No, I don't think so at this time. I mean, it's used in a wide range of products and, again, before we make some decisions that are sort of piecemeal in regards to the approach for this, I'm inclined to vote it through and then evaluate kind of a global position on this as we move forward.

MEMBER CHAPMAN: Any further discussion?

CHAIR RICHARDSON: Seeing no further discussion, do you want to do this or do you want me to do it?
MEMBER CHAPMAN: Seeing no further discussion, we'll move to a vote. We'll be using the hand vote method again. All those in favor of the motion to remove alginic acid vote aye. All those opposed, vote nay. All those abstaining?

VICE CHAIR FAVRE: Okay. Vote is 2 yes, 11 no, 1 abstention. The motion fails.

CHAIR RICHARDSON: For the record, I'm reminded to note that Harold is present.

MEMBER CHAPMAN: Next item for review and vote is the motion to remove acids, citric and lactic. Dr. Brines?

DR. BRINES: Thank you. These materials are also listed under Section 205.605(a) as acids, alginic, citric, produced by microbial fermentation of carbohydrate substances and lactic. Thank you.

MEMBER CHAPMAN: Ashley?

MEMBER SWAFFAR: So combining the citric and lactic acid, they are very widely-used in food processing for various actions, including pH control. And there was lots of public comment
in the spring and fall meeting supporting the re-listing, but there was one concern over the acids and their listing, thinking that they should be listed as synthetic. I looked at that and didn't feel that was a factor. And based on the majority of public comment, the subcommittee believes this material should be re-listed.

MEMBER CHAPMAN: Thank you, Ashley. Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove acids, citric and lactic, say aye or raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: There is 2 yes, 12 no. The motion fails.

MEMBER CHAPMAN: Next on the list is attapulgite. Dr. Brines?

DR. BRINES: Thank you. This material is listed at Section 205.605(a) of the National List as attapulgite as a processing aid in the handling of plant and animal oils. Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: This is one of
several filter aids that we've looked at over the last few months. We've not received very much comment on attapulgites since the last meeting. One of the comments says that this material does not seem to be used and it could, in fact, be allowed to sunset. Maybe it's not necessary. Another group could not find anyone that was specifically using it that replied to their survey.

However, many of the limited number of comments we received note that there was no negative reason to remove it from the list. In subcommittee, we had voted to leave it on the list. I would still suggest that there's no real reason to take it off the list with a negative reason that it may be being used out there and we simply have not identified that person, or that organization, or it may be being used in combination with some of the other filter aids, which are sometimes used together since attapulgite, bentonite, and kaolin are very similar in the manner in which they have been used.

MEMBER CHAPMAN: Any discussion on
MEMBER STONE: Do we know if it has unique properties different than bentonite and kaolin, necessarily?

CHAIR RICHARDSON: No, it does not appear to have any unique qualities that are different from some of the other ones. It was originally petitioned to be used in organic plant and vegetable oil filtration.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove attapulgite say aye. Raise your hands. All those opposed? All those abstaining?

VICE CHAIR FAVRE: That was 3 yes, 11 no. The motion fails.

MEMBER CHAPMAN: Next on the list is bentonite. Dr. Brines?

DR. BRINES: Thank you. This substance is listed at Section 205.605(a) as bentonite. Thanks.
CHAIR RICHARDSON: Bentonite is one of those filter aids. This one is used to clarify wine, so it kind of seems necessary. It has received, we didn't receive a lot of comment on it, but we do know that it is used and that it appears necessary in the wine filtration industry.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove bentonite raise your hand. All those opposed? Abstaining?

VICE CHAIR FAVRE: Vote is zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next is diatomaceous earth. Dr. Brines?

DR. BRINES: Do we want to follow the order? Then we'll go to calcium carbonate next, Tom?

MEMBER CHAPMAN: Yes.

DR. BRINES: Okay. Thank you. The next substance is listed at Section 205.605(a) of the National List and is listed as calcium carbonate. Thanks.
MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Calcium carbonate. Again, we didn't get an enormous amount of public comment coming in since the last meeting. This is the dough conditioner dietary supplement. It is quite broadly used. It is supported by industry and by several of the certifiers, one of which indicates, for example, that it's a common carrier in feed additive. I see no reason to do anything different than the vote we had in subcommittee, which was a unanimous vote to leave it on the list.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove calcium carbonate vote aye. All those opposed? Abstaining?

VICE CHAIR FAVRE: That is zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next is calcium chloride.

DR. BRINES: Thank you. This substance is listed at Section 205.605(a) of the
National List as calcium chloride. Thanks.

MEMBER CHAPMAN: Ashley?

MEMBER SWAFFAR: Okay. Calcium chloride can be obtained from extraction of non-synthetic brines. Public comment was fairly limited with some in favor of re-listing noted it can be used as a firming agent in beans and brine vegetables and aids in gelling for some pectins. One commenter cited concerns regarding the potential for contaminants in the ingredients, and suggested sending the proposal back for subcommittee. It was a unanimous vote to retain it on the list.

MEMBER CHAPMAN: Any further discussion?

MEMBER THICKE: You mentioned that it can be extracted as a non-synthetic. Do you know if it would be adequate or what would happen if it were taken off the list?

VICE CHAIR FAVRE: Seventy-five percent of the calcium chloride is manufactured through a chemical process.
MEMBER THICKE: But I'm talking about, I'm talking about organic, what percent is organic of the total demand of calcium chloride? Twenty-five percent? Probably not, huh?

VICE CHAIR FAVRE: Well, 25 percent of the supply is potentially from some other process, but we don't know.

MEMBER THICKE: Okay.

MEMBER CHAPMAN: Any other question?

MEMBER BONDERA: I'm just curious if you could expand at all, Tracy, regarding the comment on impurities that you said that came in, if you all discussed that, and how that played out in terms of affecting the vote? Thank you.

VICE CHAIR FAVRE: We actually did not discuss that in subcommittee. It was mentioned in one of the public comments, and there was one table that included some details, but that was the extent of the information.

MEMBER THICKE: Emily just clarified for me it's actually not on as a non-synthetic.

MEMBER CHAPMAN: Any further
discussion? Seeing none, we'll move to a vote on this item. All those in favor of the motion to remove calcium chloride from the National List raise your hand as an aye. All those opposed? Abstaining?

VICE CHAIR FAVRE: That was zero yes, 12 no, 2 abstentions. The motion fails.

MEMBER CHAPMAN: Next on the list is dairy cultures.

DR. BRINES: This substance is listed at Section 205.605(a) of the National List as dairy cultures. Thanks.

MEMBER CHAPMAN: All right. Dairy cultures widely used in the processing of dairy products. While the NOSB Handling Subcommittee notes that separate listings for dairy cultures is redundant with the microorganisms listing, subcommittee found no issue with continued listing. The substance satisfied OFPA criteria. There was wide support in this round of public comment for this listing. Any further discussion?

MEMBER BONDERA: Yes. I'm sorry to
ask you, I don't know if you need to repeat that but clarify it was discussed at the subcommittee level that this is a redundant listing and unnecessary, but we don't want to de-list it, just maintain status quo, or I don't understand the logic behind what you said.

MEMBER CHAPMAN: Yes. So dairy cultures is subsumed under the microorganisms listing. At this time, we felt there was no harm to continuing its separate listing on the list, as well. This is true of some other substances that appear on the list. Seeing no further discussion, we'll move to a vote on dairy cultures. All those in favor of the motion to remove dairy cultures from the National List raise your hand. All those opposed? All those abstaining?

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Dr. Brines, diatomaceous earth?

DR. BRINES: Thank you. This substance is listed at Section 205.605(a) of the
National List as diatomaceous earth, food filtering aid only. Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Diatomaceous earth is widely used throughout the organic industry as a food filtering aid, for example in syrups, including, of course, maple syrup. And there is no objection noted in the public comments that came in to remove it from the list.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove diatomaceous earth raise your hand. All those opposed? All those abstaining?

VICE CHAIR FAVRE: Vote is zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Dr. Brines, enzymes?

DR. BRINES: Thank you. This substance is included at Section 205.605(a) of the National List as enzymes, must be derived from edible non-toxic plants, non-pathogenic fungi, or non-pathogenic bacteria. Thanks.
MEMBER CHAPMAN: Lisa?

MEMBER DE LIMA: Enzymes are used as a processing aid used to carry out naturally-occurring biological processes. Over both the comment periods, there was overwhelming support to retain enzymes on the list both by organizations and industry. There was one organization that questioned whether enzymes needed to be reclassified and wanted to see an annotation to define those that had not undergone synthetic chemical change. They also commented that a review of ancillary substances should include all substances, including those already on the National List. In subcommittee, we voted unanimously to retain.

MEMBER CHAPMAN: Any further discussion?

MEMBER BONDERA: Thank you, Lisa. Based on that input you got from the public, is the subcommittee considering those reflections in terms of further review, as you described?

MEMBER DE LIMA: We looked at the
classification in using the draft guidance. We didn't believe it did. And as far as the ancillaries, I think that's a question still up because we haven't figured out what direction we're going to be going on. I think we'll have more information once we get to the ancillary proposals tomorrow.

MEMBER CHAPMAN: Any further discussion? Hearing none, we'll move to a vote. All those in favor of the motion to remove enzymes from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: Vote was 2 yes, 12 no. The motion fails.

CHAIR RICHARDSON: Could I ask, for the record, the reasons for Jennifer and Colehour voting to remove, so that I can have some clarification?

MEMBER TAYLOR: I think that it should be taken back to the committee and re-evaluated individually and not grouped together, and that wasn't an option that the committee wanted to
VICE CHAIR FAVRE: Jennifer, just FYI, the program is directed as we're not allowed to bring sunset materials back to committee. So we have to vote on them here. However, we can bring it up as an issue in committee with the next meeting then.

MEMBER BONDERA: In response to your question, Jean, I think that it, from my perspective, comes down to due diligence and whether or not we, as a committee, the NOSB, are doing our full job of fully reviewing what we're considering. And when public comment is coming in that there could have been chemical change on specific sub-items that might make something synthetic, for example, and when I ask about it, it's not been something that the subcommittee has been able to consider or look at or review, I feel like, even though the NOP is telling us we can't use certain processes to make decisions like Tracy was just explaining to Jennifer, I think that my vote is to point out the fact that I do not feel
comfortable voting for something to be re-listed on what Tom introduced this as an extensive list that's pretty cumbersome, honestly, with items on it that aren't even clear, you know, if we have all the information we need. And that's the reason for my vote, the way it was.

I do want to comment that I don't know that we're going to have time today to go around the entire table for everybody's vote, aye or nay, on every single item, which I'm happy to do. But, you know, just because I'm going to vote out of sync with the rest, this could take a long time if we're going to explain each vote.

MEMBER CHAPMAN: Thank you. Next on the list, Dr. Brines, is flavors.

DR. BRINES: Thank you. This substance is included at Section 205.605(a) of the National List as flavors, non-synthetic sources only and must not be produced using synthetic solvents and carrier systems or any artificial preservative. Thanks.

MEMBER CHAPMAN: Thank you. These
substances are used to recreate flavors in products. Review of the original recommendations, historical documents, public comments on this substance revealed that the substance met OFPA criteria. No new points were raised this round of public comment, and there was wide support for the renewal, coupled with the proposed annotation recommended by the subcommittee. The proposed annotation is on the agenda for Thursday. The Handling Subcommittee recommends the renewal of flavors on the National List.

Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove flavors from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote is 1 yes, 12 no, 1 abstention. The motion fails.

MEMBER CHAPMAN: Next on the list is kaolin. Dr. Brines?

DR. BRINES: Thank you. This listing
is included at Section 205.605(a) of the National List as kaolin. Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Kaolin is another one of those filter aids, a clay-based filter aid, which does not necessarily appear to be used widely, but it is used and is supported by industry. And we don't have negative reasons for why it should not be on the National List. The vote in subcommittee was six to keep it on the list and one person was absent. I would suggest that we still leave it on the list.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove kaolin from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the National List is magnesium sulfite. Dr. Brines?

DR. BRINES: Thank you. This
substance is included at Section 205.605(a) of the National List as magnesium sulfate, non-synthetic sources only. Thanks.

CHAIR RICHARDSON: Magnesium sulfate, we did not get a great deal of comment on this material. It is a non-synthetic source material which is used both as a dietary supplement and also to enhance flavor production in tofu. Tofu producers believe that it is necessary to their industry. The vote in subcommittee was unanimous to leave this material on the list.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove magnesium sulfate from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was 2 yes, 12 no. The motion fails.

MEMBER CHAPMAN: Next on the list is nitrogen. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(a) of the
National List and reads as nitrogen, oil-free grades. Thanks.

MEMBER DE LIMA: Nitrogen is used to reduce oxidation and it's used in the flash-freezing of foods. Over both the comment periods, all comments were in favor of re-listing and it was a unanimous vote in subcommittee.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll proceed to a vote. All those in favor of the motion to remove nitrogen from the National List say aye, raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next is oxygen. Dr. Brines?

DR. BRINES: Thank you. This listing is at Section 205.605(a) of the National List and reads as oxygen, oil-free grades. Thanks.

MEMBER CHAPMAN: Lisa?

MEMBER DE LIMA: Oxygen can be used for modified atmosphere packaging. We had very little
public comment over both periods. The second comment period we had support from one producer, and one organization suggested we de-list it due to lack of support. But we didn't find anything in the negative that it would be contrary to OFPA, and so it was passed unanimously in subcommittee.

MEMBER CHAPMAN: Any further discussion on this item? I'll note that it's also used in the brewing industry for yeast health.

MEMBER BONDERA: I'm sorry. It's used in the brewing industry what?

MEMBER CHAPMAN: For yeast health.

Colehour?

MEMBER BONDERA: Yes, I think that's a slightly interesting comment, Tom. But I'm also interested in what I referred to before, which is if there is no public input, even, like, in some cases where even one comment seems to be influencing people to vote to maintain something on the list. But if there is or isn't, I just wonder how that is affecting the decision of the subcommittee to maintain because what I heard from
Lisa was, if I got it right, that there had been not really input to maintain it on the list, but we should just because it's there.

MEMBER DE LIMA: There was one manufacturer that wrote in in the second comment period in support, and there was one comment from an organization that said because there was no support, because that was based on the first public comment period versus the second public comment period, which did have one manufacturer in support. And like I said, there were no negative points brought up by anybody indicating it was --

MEMBER CHAPMAN: Colehour, can you help me understand why you'd be opposed to oxygen in organic systems?

MEMBER BONDERA: Yes, I'm happy to. I'm not opposed to oxygen in organic systems. What I was trying to raise or ask, and I think, in this particular case, like Lisa just elaborated, it's not specifically the case, but if there is no use for something and there is no shown, or demonstrated, or commented on need, that's where
oftentimes there's no reason not to de-list something.

Again, in this particular case, it doesn't apply, but I was again hearing the suggestion that why not leave it on the list just because? And that attitude and approach concerned me in terms of the list being ever-expanding whether or not -- in this particular case, I don't think it applied. So it was more a general comment, but I think I was trying to raise the yellow flag of, you know, why would we maintain things on the list if there's no use?

MEMBER DE LIMA: I mean, I would still say that for something like oxygen, which is so benign, that, with 198 materials sunsetting, people probably aren't thinking to comment on the really non-controversial materials and that, if we did vote it off, I assume we would hear from manufacturers that are using it for packaging. That would be the danger I see in voting it off.

MEMBER CHAPMAN: Tracy?

VICE CHAIR FAVRE: I just would like to
suggest that we ought to be very cautious of demonstrating hubris and assuming that everybody is watching with bated breath every move that we're doing on this board and would take the time and effort to write in. I think the example of ethylene is a real good example of that where there are people that are busy doing their jobs and may or may not comment on it.

If we had a controversial material that had a lot of negative consequences that we didn't receive any feedback on, I might be inclined to remove it. But to Lisa's comment, for something benign, I don't think we should ever make the assumption, just because we got no comments, that it's not used. I think there's probably lots of producers and manufacturers and growers out there that use materials all the time that are not completely plugged into this process and this community at this level.

MEMBER CHAPMAN: Colehour, I have a follow-up question on a statement that you made. You noted that it's an ever-expanding list. Can
you provide me some details to that statement? Has it increased over what period of time, or has it decreased in size?

MEMBER BONDERA: No, I was actually simply referring to the more general comments that there's so many items on the list and it takes so much time to deal with them. And whether or not the list is ever-expanding, I don't feel like I need to retract that comment, but I feel like, you know, I'm not going to be able to cite data showing a progression over a history. And depending on what history you want to look at, I'm positive it has increased.

So I think, depending on how you look at the data, you're going to see that it has increased, no matter how you look at it. But I'm not going to sit here and try to cite numbers because that wasn't my point. My point was we shouldn't be spending our time on things that don't need time. That was my point.

MEMBER CHAPMAN: Thank you. Seeing no further discussion, we'll move to a vote on this
item. All those in favor of the motion to remove oxygen from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is potassium chloride. Perlite. Dr. Brines?

DR. BRINES: Yes. Next, we'll take up perlite, which is listed at Section 205.605(a) of the National List. And the listing reads as perlite, for use only as a filter aid in food processing. Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Filter aid. Is only used in food processing as another one of those filter aids. It is made from amorphous volcanic glass, which I always find quite interesting. We received public comment again that it is used in beer filtration. So, obviously, it's pretty important for different places. There was no public comment opposed to the re-listing, and it was voted six to keep it on the list in
subcommittee. One person was absent. I still recommend that we leave it on the list.

MEMBER CHAPMAN: Any further discussion on this item? Seeing none, we'll move to a vote. All those in favor of the motion to remove perlite from the National List raise your hand. Those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next is potassium chloride. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(a) of the National List as potassium chloride. Thanks.

MEMBER CHAPMAN: Tracy?

VICE CHAIR FAVRE: Yes. Potassium chloride is a commonly-occurring natural mineral, generally recognized as GRAS. It's used as a flavor enhancer, flavoring agent, nutrient supplement, pH control, and stabilizer thickener. Very little public comment, but was generally in favor of continued listing of potassium chloride.
One group did urge the NOSB to restrict supplemental vitamins and minerals to only those required by law. The vote was unanimous to retain it on the list.

MEMBER CHAPMAN: Further discussion?
Seeing none, we'll move to a vote. All those in favor of the motion to remove potassium chloride from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is potassium iodide. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(a) of the National List and reads as potassium iodide. Thanks.

VICE CHAIR FAVRE: Potassium iodine, commonly used as synthetic forms of iodine in trace mineral supplements. Public comment was generally in support of the material. One group did urge the NOSB to restrict supplemental vitamins
and minerals to those required by law. Another
group suggested an annotation as a sanitizing agent
and as a source of iodine when required by law. The
vote was unanimous to retain it on the list.

MEMBER CHAPMAN: Any further
discussion? Colehour?

MEMBER BONDERA: So is the
subcommittee intending to consider that suggestion
from the public in terms of -- I'm not going to quote
what you said. Sorry. But, yes, an annotation
that limits the ones that are required, to the ones
that are required by law? I'm just curious what
the subcommittee's thinking is from that comment.

VICE CHAIR FAVRE: Actually, in my
case, I didn't review the public comments until
after our last subcommittee meeting, so we haven't
had a chance to discuss this with the subcommittee.
Certainly, there would be nothing that would
prevent us from bringing it up at subcommittee if
the members so feel that we need to look at that.
But at this time, there hasn't been any discussion
in regards to it.
MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: So might I suggest, Tracy, that you sort of put a placeholder on that so that we could, or to the Chair, Tom, that you put as a placeholder on the potassium iodide so at the next meeting of the Handling Subcommittee, we could review that to determine if we need to proceed with any form of annotation?

VICE CHAIR FAVRE: Yes, I will. Thank you.

MEMBER CHAPMAN: Noted. Any further discussion on this item? Seeing none, we'll move to a vote. All those in favor of the motion to remove potassium iodide from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Thank you. Next on the list is sodium bicarbonate. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(a) of the
National List as sodium bicarbonate. Thanks.

MEMBER CHAPMAN: Harold?

MEMBER AUSTIN: Thanks, Tom. Sodium bicarbonate is used as a leavening agent. It is baking soda. It's also used in baking powder. It can be used as an anti-caking agent or as a stabilizer, helping to maintain the appearance in foods such as pancakes, biscuits, muffins, crackers, and cookies. Also used in self-rising flour. It's approved for use in the European Union, IFOAM, Canada, Japan, and it's also allowed by Codex. There was not a new TR for this sunset review period.

We had numerous comments, both in writing and orally, that were in support of the continued listing of this material as it still seems to be very necessary and essential as a leavening agent. There were no comments against the re-listing of this compound.

MEMBER CHAPMAN: Any further discussion of this item? Seeing none, we'll move to a vote. All those in favor of the motion to
remove sodium bicarbonate from the National List
raise your hand. All those opposed?
Abstentions?

VICE CHAIR FAVRE: The vote was zero

yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is
sodium carbonate. Dr. Brines?

DR. BRINES: Thank you. This
substance is included at Section 205.605(a) of the
National List as sodium carbonate. Thanks.

MEMBER CHAPMAN: Harold?

MEMBER AUSTIN: Okay. Sodium
carbonate, also called washing soda or soda ash.
It's also used as a leavening agent in organic
handling. It's used as an anti-caking agent or as
an acid regulator or as a stabilizer. It's
essential for characteristic color and baking of
German pretzels and lye rolls. It gives pretzels
and lye rolls that distinctive brown crust without
burning. It's also used in the making of ramen
noodles. It can be used as a neutralizer in
butter, cream, fluid milk and ice cream. Other
uses also include the processing of olives prior to canning and can be found in many Coca-Cola products.

The two previous sunset reviews did not find any environmental or human health concerns with this material. Through both periods of public comment on this sunset review, there was overwhelming support of the continued listing of this material as being essential for organic handling. There were no comments against the re-listing.

MEMBER CHAPMAN: Thank you. Any further discussion on this item? Seeing none, we'll move to a vote. All those in favor of the motion to remove sodium carbonates from the National List, raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the National List is waxes, carnauba wax. Dr. Brines?

DR. BRINES: Thank you. This
substance is included at Section 205.605(a) of the National List as waxes, non-synthetic carnauba wax and wood resin. Thank you.

MEMBER CHAPMAN: At this time, we'll just consider the vote on carnauba wax. Zea?

MEMBER SONNABEND: We're going to take these separately because there's just slightly different issues to point out. Carnauba wax is a natural extract or exudate from the tree Copernicia cerifera or Copernicia prunifera. It is, when it was originally reviewed, it was done so by the crops committee because it was considered post-harvest handling and all the waxes were reviewed together just under one heading, wax. And wood resin and carnauba were what was approved for the National List. But because it was the crops committee, there was never a vote taken on whether it was agricultural or non-agricultural. And so when it got transferred in the rule-writing process over to the handling section, it was just placed on 605(a) without that vote ever having been taken.

So, therefore, we feel that it is
important to have that vote and to consider then
the annotation change to move it over to the proper
list where it belongs, which is 606. So we'll do
that as a separate annotation after the sunset
process, but, in the meantime, we're going to
consider renewing it, as we do for sunset, under
this review.

We did commission a technical report
to look at the classification, to look at ancillary
substances and because the original TAP was
extremely sketchy. So we found in the TR that
there is some organic carnauba on the market. We
couldn't get accurate information about whether
there's enough to meet the demand to take it off
the list entirely, and so we will entertain the
annotation change.

We looked into the ancillary substances
and it appears that this wax is almost always
combined in formulated products with other waxes,
plus other substances, which some of which are on
the National List and some of which may be
considered ancillary, and that the raw material of
carnauba itself did not come into those formulations with anything we could identify as ancillary substances. And in the two rounds of public comment, while we got criticism that we should include an ancillary substance chart, there were not specific suggestions of which things were ancillary substances in raw ingredients, and we have not been able to find any. And so we're going to have to leave that to the reviewers of the formulated products to determine compliance. But we do know that OMRI and others have approved certain formulations with all things on the National List and so that it is possible to be compliant on these waxes.

We got pretty general support for renewing this, whatever category it's in. People didn't object to whatever category it's in. But one point brought up frequently in the public comment, especially from the public interest groups, was the desire for labeling of the fruit and vegetables that have been waxed.

It's pretty clear that consumers do not
expect their produce to be waxed. And probably, if it was explained to them sufficiently what it was waxed with in an organic situation, they would be fine with it, but there isn't really the opportunity to explain that. And labeling, while it is a requirement for containers, is not necessarily a requirement for signage in stores or for individual fruit stickers and the like.

So we looked into whether we could put an annotation, such as labeling, through and the Department told us that we could not. And so, therefore, we are urging voluntary labeling for produce coatings at the store level and are not putting forward an additional labeling annotation at this time.

MEMBER CHAPMAN: Any further discussion on this item? Jean?

CHAIR RICHARDSON: Zea, two questions. Did you receive any public comment suggesting that there are human health issues related to it? And also could you clarify the extent of its necessity in organic production?
MEMBER SONNABEND: No, no public comment about human health that I was able to find in two rounds. And its necessity, it is a transpiration blocker and, therefore -- I mean, it's also used for cosmetic purposes for shine. But the main function is really to retard evaporative loss from fruit peel in citrus and in apples and other fruits and in some vegetables. So to the point that something needs to travel to get into the distant market and then be around on a store shelf, yes, it's very much necessary. If you want to restrict organics to local sales, then maybe not so much necessary.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: I wanted to follow-up. So it's not grown. It's harvested? Wild?

MEMBER SONNABEND: There are some certified organic plantations, but it almost all comes from Brazil.

CHAIR RICHARDSON: So it's planted and then grown under conventional production
MEMBER SONNABEND: The non-organic forms are conventional, yes. But I don't know about wild harvest, if that also occurs.

MEMBER MARAVELL: Yes, Zea, I was wondering if either you or the department could elaborate a little bit more on the restrictions that we're under with regard to making an annotation on labeling of the waxes? So, I mean, just for my edification.

MEMBER SONNABEND: That has to be the Department, not me.

MR. MCEVOY: So the question is about requiring or recommending a requirement that --

MEMBER SONNABEND: That waxed fruit be labeled at the point of sale.

MR. MCEVOY: Right. So the authority on the Organic Food Production Act is about organic labeling, so to require labeling on an organic product is further labeled with some other material would be outside the scope or the authority of the Organic Food Production Act.
MEMBER MARAVELL: Whose authority would it be under?

MR. MCEVOY: I would expect FDA.

MEMBER MARAVELL: And if the Board were to make a recommendation to move in that direction, then the Secretary is authorized under the statute to coordinate with the other secretaries. Is that something that could be brought up for inter-agency coordination?

MR. MCEVOY: Yes, that's certainly a possible, if the Board made a recommendation in that regard, that we could forward that recommendation to FDA and work with them to see if that's a possibility. I think it might be a better route for us to explore where that authority lies and, if it is with FDA, have them present and to address that as a possible outcome.

MEMBER MARAVELL: So, Zea, if you feel that's a productive route to go, perhaps that could be a continuing part of this discussion that we could --

MEMBER SONNABEND: I would be happy to
bring that back to the Handling Subcommittee to see what we could do in that regard. And this applies to all three of the wax products.

MEMBER CHAPMAN: Any further discussion on this item? Seeing none, we'll move to a vote. All those in favor of the motion to remove waxes, carnauba wax, from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote is zero yes, 13 no, one abstention. The motion fails.

MEMBER CHAPMAN: Next on the list is wood rosin, sic resin.

DR. BRINES: Thank you. Yes, the current listing on the National List is under Section 205.605(a). The listing currently reads as follows: waxes, non-synthetic, carnauba wax and wood resin. Thank you.

MEMBER CHAPMAN: Zea?

MEMBER SONNABEND: Okay. This has many things in common with the previous wax. However, this one clearly is in need of a technical
correction and for the spelling of wood rosin, which is actually a different substance than wood resin, and the TR points that out clearly. We quoted it in the beginning of the review so that it's very clear to the people who need to do that technical correction. And once again, this is a component of usually-formulated coating materials because a combination of shellac, carnauba, and rosin for different purposes is what works best. We were unable to find any ancillary substances that came with the raw material, but there may be some added to formulations.

We heard input from a number of interested parties that wanted this kept on the list because it is used in the wax formulations. But unlike carnauba, it is not ever produced organically because it's a byproduct generally, rather than grown solely for that purpose.

Same issues apply concerning labeling. And we will, once again, take the labeling back to the committee, and general support with the provisional concern about labeling.
MEMBER CHAPMAN: Any further discussion on this item? Jean?

CHAIR RICHARDSON: Did you receive additional comment that would indicate that there were any health impacts from the use of this resin?

MEMBER SONNABEND: No.

MEMBER CHAPMAN: Any further discussion? Colehour?

MEMBER BONDERA: Thank you. I apologize if I missed this, which, I'm not sure if I did or not. But if I did, I'm sorry. I'm just curious about some of the comments that we received regarding methods of extraction or annotation restricting extraction approaches on this.

MEMBER SONNABEND: Extraction of wood rosin? I don't, I don't recall seeing anything specific to wood rosin.

MEMBER BONDERA: Okay. Maybe you're right. Actually, maybe that was back to carnauba. Okay, thank you.

MEMBER CHAPMAN: Any further discussion of this item? Seeing none, we'll move
to a vote. All those in favor of the motion to remove waxes, wood rosin, from the National List say aye, raise your hand. All those opposed? All those abstaining?

VICE CHAIR FAVRE: The vote is zero yes, 13 no, one abstention. The motion fails.

MEMBER CHAPMAN: Next on the list is yeast. Dr. Brines?

DR. BRINES: Thank you. This is the final material included at Section 205.605(a) of the National List. The listing reads as yeast, when used as food or a fermentation agent, yeast must be organic if it's end use is for human consumption. Non-organic yeast may be used when equivalent organic use is not commercially available. Growth on petrochemical substrate and sulfite waste liquor is prohibited. For smoked yeast, non-synthetic smoke flavoring process must be documented. Thanks.

MEMBER CHAPMAN: Zea?

MEMBER SONNABEND: Thank you. Okay.

Yeast. This review is mercifully short compared
to some of our previous discussions about yeast on
the NOSB. We did, in the first posting, survey the
industry to find out how much progress was being
made on the use of organic yeast for all the
different ways in which yeast is used. That's a
good example of the National List process working
because, leading up to the change in 2010, it was
no commercial availability requirement towards use
of organic yeast. There are dozens, if not
hundreds, of forms of yeast and different purposes
that yeast is used for, and there would need to be
a specific organic farm for each particular use.
So over the years that it's been reviewed, many of
these strains of yeast and many of these uses have
been able to be filled by organically-grown yeast
but not quite all of them.

So the commenters in the first round of
publication indicated that the forms of yeast that
are not yet available organically include Torula
yeast, nutritional yeast for livestock feed,
gluten-free yeast, fresh yeast, and some types of
wine yeast. One supplier suggested that dry yeast
could be removed from the list while other forms stayed, but this is a distinction that it would be very, not the top of our priority list for an annotation change to try and make it this time. I'll put it that way. We would entertain a petition for that, if someone wants to.

We took a look at the ancillary substances in yeast. We posed the question in the first posting information is sought on why any ancillary substances in yeast do not meet the review criteria in the organic rule. The only answer we got or only comment that addressed that was questioning VHT in terms of human exposure but no specific answers on the review criteria that we used. So we are proposing renewing yeast at this time.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove yeast from the National List, raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote is zero
yes, 14 no. The motion fails.

MEMBER CHAPMAN: That concludes the sunset review of 205.605(a), and we'll proceed to 205.605(b), starting with acidified sodium chlorite. Dr. Brines?

DR. BRINES: Thank you. This substance is included under Section 205.605(b), synthetics allowed. The listing reads as acidified sodium chlorite, secondary direct antimicrobial food treatment and indirect food contact surface sanitizing, acidified with citric acid only. Thank you.

MEMBER CHAPMAN: Ashley?

MEMBER SWAFFAR: Acidified sodium chlorite is used as a processing aid, for example as carcass washes. Comments stated that it is an extremely valuable tool in their food safety programs. And based on the overwhelming majority of public comment in both meetings in support of re-listing, the subcommittee felt this should be renewed. And I will point out that one comment stated we should consider an annotation change, and
we can discuss this at the subcommittee level if this is something that we would like to pursue.

MEMBER CHAPMAN: Zea?

MEMBER SONNABEND: Just a question for Ashley. What annotation change was suggested? Because I don't recall seeing that.

MEMBER SWAFFAR: One group said that the listing for ASC should be annotated no detectable residue may be present in the final food. We can discuss that.

MEMBER SONNABEND: Thank you.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove acidified sodium chlorite from the National List, raise your hand. All those opposed? All those abstaining?

VICE CHAIR FAVRE: Calvin, I'm sorry, I didn't see your vote.

MEMBER CHAPMAN: Is that a no vote?

VICE CHAIR FAVRE: Thank you. We had one yes, 13 no, zero abstentions. The motion fails.
MEMBER CHAPMAN: Next on the list is alginates. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List as alginates. Thank you.

MEMBER CHAPMAN: Tracy?

VICE CHAIR FAVRE: Yes. Alginates occur naturally in seaweed, mainly in the form of sodium, potassium, calcium, and magnesium salts with alginic acid. They are unique in that they form gels or act as coatings or thickeners without requiring heating, thereby making them ideal for applications where food is sensitive to temperatures.

Public comment was mixed in regards to alginates. Those in favor of its re-listing note its long history of use with no ill effects on human digestion or ecosystem due to harvesting and assert the properties imparted by alginates are essential for some processed food formulations. Those opposed express concern regarding the concentration of heavy metals in wild harvested
seaweed and the fact that alginates are used primarily to enhance texture in foods and, therefore, not compatible with OFPA criteria. One commenter urged de-listing unless they have allowed uses for which they are essential. This is, again, a sea product where we have some concerns expressed in regards to over-harvesting and potential ecosystem impact. We had a unanimous vote of those present to not remove alginates, but we did have three absent at the time of the vote. And since it is so widely used for some key applications, I am still inclined to leave it on the list until we come up with more of a systems-based approach for how to deal with sea products.

MEMBER CHAPMAN: Thank you. Any further discussion of this item? Yes?

MEMBER BONDERA: That comment that you just made, Tracy, regarding essentiality resonates with me, and I'm just curious if or how it would be determined that the product is essential. By who? I'm not sure how to wrap my brain around that
concept in this example or in this case. I don't know if you have any thoughts on that.

VICE CHAIR FAVRE: Well, just like we determine essentiality from others that have used products and sent in comments that it's important to their process. In particular, given the fact that it has unique applications for low-temperature products, I think that's an indication to me.

MEMBER CHAPMAN: Zea?

MEMBER SONNABEND: Colehour, at the spring meeting, not so much this meeting but the spring meeting, we heard very specific public comment, verbal and written, about the applications that alginates are used for and are considered essential. But I don't recall the details right now of what those were, but I do know that we received that input.

MEMBER CHAPMAN: Colehour?

MEMBER BONDERA: Yes, thank you, Zea. I guess, as a follow-up, my question was how and who would be determining that essentiality in terms
of use versus necessary need, and, in this case, again, I'm not sure how to determine that or wrap my brain around it. Thank you.

MEMBER CHAPMAN: We'll go to Tracy and then Jean. Tracy?

VICE CHAIR FAVRE: Just in response to that, the TR did indicate that there were some unique properties.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Tracy, just to clarify, this would be one of the large group of materials that we'll be looking at how to deal with in terms of its derivation from ground seaweed?

VICE CHAIR FAVRE: Yes.

MEMBER CHAPMAN: And I have one specific comment from the first listing that said it's effective for supporting structure and stabilization and thickening of products in an acidic environment. The majority of our products are acidic. Provides stability in calcium environments, such as yogurts and other dairy products. Zea?
MEMBER SONNABEND: In response to Colehour, I just want to say we did discuss this thoroughly at the subcommittee level because I went into this questioning why we had so many gums on the list or thickening agents and I really wanted to try and tease out the difference between the different ones and their uses. And so we did look into this fairly extensively at the subcommittee.

MEMBER CHAPMAN: Any further discussion? The Handling Subcommittee notes the request for further review of marine items. Seeing no further discussion, we will move to a vote.

CHAIR RICHARDSON: Was Harold able to hear the discussion during that period when you had up a funny thing or not?

MEMBER AUSTIN: No, I was not.

CHAIR RICHARDSON: So for how long was Harold not at the meeting?

MEMBER AUSTIN: We had just started talking about the alginates, and then you all left me.
CHAIR RICHARDSON: So, Harold, let me ask you a question. Have you read the materials and public comment relative to alginates?

MEMBER AUSTIN: I have, Jean, and I'm comfortable to vote at this time.

CHAIR RICHARDSON: Is there any objection to Harold voting, even though he hasn't been present for the last few minutes? I see no objection. Okay, Tom?

MEMBER CHAPMAN: We'll move to a vote on this item. All those in favor of the motion to remove alginates from the National List, raise your hand. All those opposed? All those abstaining?

VICE CHAIR FAVRE: The vote was 2 yes, 11 no, one abstention. The motion fails.

MEMBER CHAPMAN: Next on the National List is ammonium bicarbonate. Dr. Brines?

DR. BRINES: Thank you. This substance is included on Section 205.605(b) of the National List as ammonium bicarbonate for use only as a leavening agent. Thanks.

MEMBER CHAPMAN: Harold?
Ammonium bicarbonate is used as a leavening agent. It has critical functionality in certain cookie and cracker baking. Used in baking where yeast is not used. It cannot be used in moist baked goods. It helps provide certain characteristics, textures, such as in crackers, as well as aids in controlling of cookie spread during baking.

I'd also point out that both of the ammonium carbonates are the only leavening agent that are completely eliminated through the baking process and there currently, according to the comments received, there currently are no organic alternatives to these materials.

They're approved for use widespread in various other countries. During the original TAP, previous sunsets, and during both postings for this round of sunset review for both public comment periods, there were no concerns raised of environmental or human health concerns or issues at this time. All public comment for both postings were in favor of continue keeping these materials
on the National List.

MEMBER CHAPMAN: Any further discussion on this item? Seeing none, we'll move to a vote. All those in favor of the motion to remove ammonium bicarbonate from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote is zero yes, 14 no, zero abstentions. The motion fails.

MEMBER CHAPMAN: Next on the list is ammonium carbonate. Dr. Brines?

DR. BRINES: Thank you. Similarly, this substance is included at Section 205.605(b) of the National List and reads as ammonium carbonate, for use only as a leavening agent. Thank you.

MEMBER AUSTIN: Okay. Ammonium carbonate. It's used in the baking of flat-baked goods, such as cookies, crackers. It's often referred to as baker's ammonia in cooking recipes and by chefs. It's also used in the baking of bread sticks, cookies, crackers, because it helps them
to be both lighter and crispier. It's also used in many traditional Greek cooking recipes. They're heat activated, so they do not rise until they're put into the oven and the baking process starts. And, again, like ammonium bicarbonate, ammonium carbonate also is completely eliminated during the baking process.

Again, there are no organic alternatives that have been stated. Widely recognized for use. Considered GRAS by the FDA.

This one, during the first posting for public comment, we did not receive any comments specifically for this material. During the second posting, we received two comments, one from a handler and one from a producer, that were in support of the re-listing of this material. One public interest group did not support the re-listing simply because there was a lack of showing any support during the first round of public comments.

I would point out that both of these materials have been looked at together in the past.
in previous sunset reviews, and so there may be a little bit of confusion from the organic handlers just considering both of these materials interchangeable, one versus the other. So I'm thinking that that's probably why, originally, we did not get a lot of public comment coming back from it.

Other than that, we had three comments, two in support of re-listing and one not just because there wasn't enough support.

MEMBER CHAPMAN: Any further discussion of this item? Seeing none, we'll move to a vote. All those in favor of the motion to remove ammonium carbonate from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no, zero abstentions. The motion fails.

MEMBER CHAPMAN: Next on the list is ascorbic acid. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the
National List and reads as ascorbic acid.

MEMBER CHAPMAN: Tracy?

VICE CHAIR FAVRE: Ascorbic acid is a vital nutrient necessary for humans and other primates. It's added to many foods to restore vitamin C lost during processing. Some FDA regulations require vitamin C fortification, which is often achieved with ascorbic acid. It's used, it's manufactured using a culture process from dextrose.

Public comment was divided with some comments -- I should remark that the primary source of vitamin C is ascorbic acid. So public comment was divided. Some commenters remarking that it's being used primarily as a preservative and, therefore, not consistent with organic agriculture production. However, the majority of comments strongly supported re-listing, stating the ingredient to be critically essential to maintaining nutrients and freshness in their products.

The vote was unanimous to retain
ascorbic acid on the National List.

MEMBER CHAPMAN: Any further discussion on this item? Seeing none, we'll move to a vote. All those in favor of the motion to remove ascorbic acid from the National List raise your hand. All those opposed? All those abstaining?

VICE CHAIR FAVRE: The vote is zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is calcium citrate. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List and reads as calcium citrate. Thanks.

MEMBER CHAPMAN: Ashley?

MEMBER SWAFFAR: Calcium citrate has many uses, including a pH adjuster, and used during cleaning and sanitizing products. We received very few comments, but we did receive some from handlers stating that they support the re-listing. The subcommittee was unanimous in support for
re-listing, and one comment did suggest an annotation change, and we can discuss this at the subcommittee level if this is something that we'll be pursuing.

MEMBER CHAPMAN: Any further discussion? Jean?

CHAIR RICHARDSON: Ashley, can you clarify what was the annotation change that was being suggested?

MEMBER SWAFFAR: So the commenter said many, if not all, of the citrates are prohibited by 205.600(b)(4), preservative, flavors, color enhancement, nutritional fortification, and the use of calcium citrate should be restricted to uses that are in compliance with 205.600(b)(4).

MEMBER CHAPMAN: Any further discussion of this item? Tracy, did that commenter provide any information about this substance -- Ashley -- this substance is used as an adjuvant or a processing aid? Because that's what that section applies to.

MEMBER SWAFFAR: No.
MEMBER CHAPMAN: Thank you. Any further discussion? Seeing none, we'll move to a vote. All those in favor of the motion to remove calcium citrate from the National List raise your hand. All those opposed? Abstaining? Zea? Zea, we didn't get -- is that a no vote or an abstention?

VICE CHAIR FAVRE: The vote was one no, 13 -- excuse me. One yes, 13 no, zero abstentions. The motion fails.

MEMBER CHAPMAN: Next on the list is calcium hydroxide. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List and reads as calcium hydroxide. Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Calcium hydroxide is used in aluminum-free baking powder and clarifies sugar from molasses and is a necessary conditioner in the making of the corn for tortillas. It appears to be quite necessary in a
number of industrial applications, food applications. No alternatives have been identified. It does not appear to have negative human health impacts, and the public comment supports its continued re-listing and in subcommittee it was unanimously voted to be retained on the list. Nothing further seems to indicate that we should take it off the list.

MEMBER CHAPMAN: Any further discussion of this item? Seeing none, we'll move to a vote. All those in favor of the motion to remove calcium hydroxide from the National List raise your hand. All those opposed? Those abstaining?

VICE CHAIR FAVRE: The vote is zero yes, 13 no, one abstention. The motion fails.

MEMBER CHAPMAN: Next on the list is calcium phosphates. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List and reads as calcium phosphates, monobasic, dibasic, and tribasic. Thank you.
MEMBER CHAPMAN: Harold?

MEMBER AUSTIN: Thank you, Tom. All three of the calcium phosphates are used as leavening agents in organic handling. They're used as dough conditioners, yeast food, and/or as expanding agents. Considered to be a critical component in baking powder, aluminum-free. Monobasic also could be used as a buffer, a firming agent, a sequestering agent, and is popular in pancake mixes, usually in combination with sodium bicarbonate. Also can be used in baking goods, such as cookies, cakes, potato chips, and also sometimes used as a firming agent in canned fruits and vegetables.

Dibasic calcium phosphate is used to enrich flour, noodle products, and in both dry and cooked forms of breakfast cereals. It is often used as a dough conditioner and can be added as a thickening agent for various cheese products.

Tribasic calcium phosphate is an anti-caking agent, buffering agent, provides very critical function as a free-flow aid in
finely-powdered salt and other seasonings used in baking. Also serves as a food source for yeast and bread-making. It can be used as an anti-caking agent, dry powder, such as spices. Also as a thickener, stabilizer, and a sequestering agent in many dairy products.

The original TAP and the previous sunsets and previous public comment and historical information looked at did not raise any human health or environmental concerns or issues in the past and found these materials to be of low toxicity and low environmental contamination concerns.

During our first cycle of public comment period, this time we received 11 comments, mostly in support. There were a couple of concerns raised which I'll delve into here in just a little bit.

During the second posting for public comment, we received 14 additional comments, supported by three oral comments, as well, that we received yesterday. We had one trade association survey that showed that these are still very
essential. One certifier stated that there were some used that they certify. Two stakeholders stated that there's still a strong need for these materials. Six handlers in support, one international inspectors association in support.

One commenter also stated that calcium phosphates are used in several of their plant-based organic beverages as a source of calcium. Another stated that they're used in their organic crackers and have yet to find an organic alternative that would work suitably for them.

One commenter, providing both written and oral statements, stated that, while concerns have been raised by some commenters on the accumulative health impact, the safety of phosphates is also supported by international regulatory authorities, such as the U.S. FDA, European Commission, Health Canada, Food Standards of Australia, New Zealand, and many others.

Additionally, the joint FAO/WHO Expert Committee on Food Additives, an international scientific body responsible for evaluating the
safety of food additives, has reviewed phosphate additives numerous times over the past 50 years and has consistently found them to be safe and suitable for use in food.

This commenter also raised concerns about some of the studies that were being referenced, stating that these were not peer reviewed and challenged the validity of some of the information put forth. There was also an oral testimony yesterday by Dr. Myra Weiner that stated that dietary studies show how safe and non-carcinogenic the phosphates are and accumulative levels were very low in comparison to the daily intake needs. They asked that calcium phosphates continue to be allowed until we can properly review the TR, as requested, the scientific literature that is both complete and thorough.

And part of this is we had two public interest groups and one trade association not in favor of re-listing at this time, stating that the use of inorganic forms of phosphates as a whole
caused by an overall increase of usage has raised some human health concerns.

The subcommittee at this time has requested a new technical evaluation report to help provide a more detailed and non-partial information on this material for us to review. We are ready to take up this discussion on phosphates in a more detailed frame as a whole once we have received a TR and can have this discussion in the spring.

We need to cautiously, be cautious in our approach but thoroughly look at the concerns that have been raised and then revisit these materials when we're better informed to have a transparent decision and discussion.

MEMBER CHAPMAN: Any further discussion of this item?

MEMBER MARAVELL: Yes. There's been some requests from the public commenters that the materials, in general, be tabled until we're able to review the technical review that's coming in. Could I just get clarification why that is an option
that we are not considering?

CHAIR RICHARDSON: I would ask McEvoy to please provide us with clarification as to why we are not tabling any of these sunset materials at this time. Is it due to rulemaking or what might be the reason?

MR. MCEVOY: Sure. Yes, this is the second meeting for sunset review of these 2017 materials, and so, in order for us to complete the work that we need to do in terms of renewing these substances after the Board completes their review of these substances, we need the Board to complete their review at this meeting. There's nothing that precludes the Board from taking up these substances in the future, but this is the second meeting and the meeting where we need the Board to complete their review of the 2017 substances.

MEMBER CHAPMAN: So we have Nick as a follow-up, then Zea, then Harold. Nick?

MEMBER MARAVELL: So could I just get some additional information on how the Board would proceed if the Board wanted to bring up the issue
of these phosphates? I'm not quite sure, some of these procedures are new to me, what would be the process that the Board would engage in.

MR. MCEVOY: Well, the Board creates a work agenda in conjunction with the program for what they're going to work on in the next semester or the next time frame. And so if the Board wants to take up these particular issues and look at phosphates in particular, you can request to put that on the work agenda for additional consideration.

MEMBER MARAVELL: Would that be a Board petition, or what would be the mechanism?

MR. MCEVOY: The mechanism is the mechanism that exists for any particular topic that the Board would like to consider. So there are items that go on the work agenda that are from petitions. There are items that go on to the work agenda because of sunset review time frames. There's items that go on the agenda because of a request from a program, and there are items that go on the agenda from requests from the Board
themselves.

So if this is something that the Board wants to take on as additional work, then it gets brought forward by the subcommittee to the Executive Committee, and there's a discussion of the Executive Committee for the final work agenda for the next semester, the next time frame. So it's the same process that we've had in place for many years.

MEMBER MARAVELL: Well, I'm a little unclear what motion the Board would make on this matter.

MEMBER CHAPMAN: So if I can follow-up, Nick, the Handling Subcommittee requested a TR for all phosphates to look at the accumulated health effects. Our intention was to wait for that to come back, review it, and then, at that point, if additional action was necessary, to add phosphates as a whole to the work agenda to then spur proposals, much like we have on Thursday that have come up. A couple from the Handling Committee are the reclassifications and the annotation changes.
Given our last executive call, we thought it was prudent to actually request phosphates be added to the work agenda prior to the TR. So that request has been made to the Executive Committee, and it's in this process right now.

MEMBER MARAVELL: So, for example, an annotation change could be proposed and voted on by the Board at the next meeting, for example?

MEMBER CHAPMAN: For example, that's a possibility or even a recommendation to remove the material.

MEMBER MARAVELL: Oh, okay. But that would be on a separate track because we've already done the sunset approval but --

MEMBER CHAPMAN: It would be a proposal separate from sunset.

MEMBER MARAVELL: Yes, okay. I just need to be clear.

MEMBER CHAPMAN: Next, Zea and then Harold.

MEMBER SONNABEND: Okay. I have two points. And, Miles, correct me if I'm wrong, but
I believe we were told recently by the department that we can do a sunset review shorter than five years if we wish to move some things up so that we can spread up our workload for five years from now again. So we could consider doing another, you know, doing a proactive sunset review, if we will, in six months or a year from now, right?

MR. MCEVOY: Yes, we've had some discussions about that. I think we need to think about that in more depth because the sunset review process has to occur within that five-year time frame, and so these substances that are being reviewed at the current time are not renewed yet, right? So there's already been a number of votes to complete the review of a number of these substances. Sometime next year, the AMS will publish a Federal Register notice to renew these substances, and then they'll be renewed starting at the sunset date, which is actually not until 2017, and that's when the five-year time frame begins.

So if you did a sunset, an additional
sunset review between now and when the new time frame starts, it probably would not count. So those are, I think we just need more time to consider that request of reviewing these substances through a sunset review process between now and the next sunset date.

MEMBER SONNABEND: However, if we take up something for a future annotation change, like in six months or a year, then that will reset the sunset clock for that period when that rulemaking is done on an annotation change.

MR. MCEVOY: Yes, that's correct. When there's a proposed rule and the final rule for any kind of change to a substance annotation, then that resets the five-year time frame.

MEMBER SONNABEND: Okay. So my next point is more broad, but it applies to the phosphates. There's a lot of information about food and food hazards that comes out in the press all the time. It seems that every time we have an open public comment period or sometimes just coincidentally right before a meeting we get these
broad, sweeping press reports concerning food hazards. Before the last meeting, there was a very generalized one about how all gums and thickeners led to gut inflammation. I don't know if people recall this in the spring. But if you looked back at it, if you looked at the details of the study that it was based on and the article, it was extrapolation from one very narrow study about one inflammation situation, saying that if this gum caused that then all gums probably do, and all gums probably do is what's picked up by the press.

In the last six months, we've recently, very recently had an article about cured meat causes cancer. Well, I didn't have time to go back to the citation of the original study because this was so recent, but the popular press articles did not say what about cured meat caused cancer. And when you got to the bottom of the article, they said you don't really have to stop eating bacon, you just have to eat less bacon. Well, this is not what people consider evidence exactly, and so we need to do more investigation of these things.
And so the claim that phosphates cumulatively are bad for you may be right, but we have no idea of how much phosphate needs to accumulate, how many servings of something this means, and all of the necessary details that you would need to make an informed decision about this.

And so there is one simple way in our personal life to deal with this, and that is eat less processed food. And I'm sorry if that offends food manufacturers. But the world is a big, scary place in the world of food, and so, while we evaluate the evidence, we need time to look into these things. That's why we commissioned a TR. But because we can't tell if, you know, if you eat 14 cups of yogurt a day you're getting too much phosphates, or if you eat a typical serving of one yogurt every week, that's too much.

So we need to take a better look at it, and I'm not prepared to not proceed with sunset because of this lack of detail in our input. But we are taking it seriously, and we will take a further look at it. Same thing with the processed
meat causes cancer thing so everyone can still eat some bacon, if not all the bacon they want.

MEMBER CHAPMAN: Harold?

MEMBER AUSTIN: Yes, I just wanted to let everybody know that, during our subcommittee conversations on all the phosphates, calcium phosphates included, we took the comments leveled on the accumulative effect of them very seriously, and that's what prompted us to ask for the TR and ask for this to be added to our work agenda for the spring.

As we saw yesterday, we see that there's other sides of the science being presented. So I think we need to move cautiously. I think we still need to support these materials for the time being until we can make a validated decision based off of the information provided to us once we receive the TR. And then we can make a decision based off the facts in a clear, concise way that's transparent and can lead us forward. Whether we annotate or we choose to remove them at that point in time yet to be determined, but that's a decision
that we need to decide in the future. Today, we need to focus on the sunset. So thanks, Tom.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Yes. In a way, I'm just reiterating what Zea and Harold have just said is that we took this issue of the potential accumulative impacts of the phosphates very seriously, and I had thought that I would vote against this material. But I just don't feel that I really have enough scientific data to support removal at this time, and I take very seriously the need for us to have a really high-quality technical report that would allow us to fully evaluate the potential health effects on a cumulative basis.

So it seems like keeping it, for everybody to bear in mind that we will be looking at this in great detail on our work agenda immediately following this meeting.

MEMBER DE LIMA: I just want to follow-up on something. An oral commenter suggested that maybe the phosphates were in certain products due to the FDA's standard of identity, and
that is not the case for the products that I was asking about.

MEMBER CHAPMAN: Harold, I noted in your review you said that calcium phosphate was used in an enriched flour. Do you know if that was due to an FDA requirement for the enrichment of flour?

MEMBER AUSTIN: That I do not, Tom.

MEMBER CHAPMAN: Zea?

MEMBER SONNABEND: If you look in the nutrient vitamins and minerals TR, it does say the requirements for enrichment, and it does not include the calcium phosphate. It's B vitamins mostly.

MEMBER CHAPMAN: Thank you. Any further discussion on this item? Okay. I know I encouraged quickness and efficiency, but on these items, that's to ensure we have enough time on these items that we truly need a thorough discussion on.

But seeing no further discussion, we shall move to a vote on this item. The motion is to remove calcium phosphates, monobasic, dibasic,
tribasic, from the National List. All those in favor of removing calcium phosphates from the list raise your hand. All those opposed? All those abstaining?

VICE CHAIR FAVRE: The vote is 2 yes, 10 no, 2 abstentions. The motion fails.

MEMBER CHAPMAN: Next on the list is carbon dioxide. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List and reads as carbon dioxide. Thanks.

MEMBER CHAPMAN: Lisa?

MEMBER DE LIMA: Carbon dioxide is used in modified atmosphere packaging. It's used in the freezing of foods, carbonation of beverages, as an extracting agent, and also as pest control in grain and produce storage. Over both the comment periods, all public comment that we received was in favor of re-listing. This includes organizations and industry.

MEMBER CHAPMAN: Thank you. Any
further discussion on carbon dioxide? Seeing none, we'll move to a vote. All those in favor of the motion to remove carbon dioxide from the National List raise your hand. All those opposed? Abstaining?

VICE CHAIR FAVRE: Zero yes, 14 no. The motion fails.

CHAIR RICHARDSON: At this time, I would like to suggest that we take a short break. If you'll return back here in 15 minutes, we'll start promptly again. And I imagine that the afternoon ones or the ones that we get to later on 606 will take us quite a bit longer to get through as individuals than the ones we've been zipping through this morning.

(Whereupon, the above-referenced matter went off the record at 10:26 a.m. and went back on the record at 10:50 a.m.)

CHAIR RICHARDSON: All right. The lobbying can stop now. Everybody can go back to their seats.
We will move along with the agenda, and we are not -- we won't be finished by lunch, because I'm not going to pay for it. So feel free to ask all of the discussion you want, Board members. Are we all back to our seats?

All right. I will turn this back over to the Chair of the Handling Committee. Tom, I think we are up to chlorine materials.

MEMBER CHAPMAN: Yes. One of the members has asked to speak. Mac Stone?

MEMBER STONE: Mr. Chairman, just for the record, as yesterday when I hold my hand with one finger up, that means yes, sir. If I hold a different finger up, you can interpret it any way you'd like.

MEMBER CHAPMAN: Thank you. I am also waiting for Colehour to vote with the Shaka.

CHAIR RICHARDSON: I would ask that those comments be deleted from the record.

MEMBER CHAPMAN: Yes, Jennifer.

MEMBER TAYLOR: Thank you. Listening to the comments that we had going around the table
in response to issues like essentiality and
comments from the public, and how we can increase
those kinds of comments from the public, I do think
that it is very important -- it's unfortunate that
Miles isn't here right now -- but that it's
important that we get that docket system in place
or set up another alternative system, so that we
can continually collect information from the
public, and when it's time for our vote we're not
resting on one response or two, or not enough
response and assuming that we are missing folks.
So we are actually having an annual year-long open
docket.

I think that will really help our
process and help our evaluation of the material
successfully.

CHAIR RICHARDSON: The Chair notes a
general comment from Dr. Taylor in regards to the
need to have a public docket just for a reminder
to all of us on the Board and the NOP, that the
broader publics would like to see an open docket
that would allow us to receive ongoing public
comment. This isn't directly related to handling per se, but it is a general comment to be noted in the record.

Thank you, Jennifer.

Back to Tom.

MEMBER CHAPMAN: Chlorine materials, Dr. Brines.

DR. BRINES: Thank you. This listing is at Section 205.605(b) of the National List and reads as follows, "Chlorine materials, disinfecting and sanitizing food contact surfaces, except that residual chlorine levels in the water shall not exceed the maximum residual disinfection limit under the Safe Drinking Water Act. Calcium hypochlorite, chlorine dioxide, and sodium hypochlorite."

Thanks.

MEMBER CHAPMAN: Ashley?

MEMBER SWAFFAR: The chlorine has many uses as a sanitizer, and the majority of public comment was in support of the relisting of chlorines, stating it was essential and...
alternatives were not as effective. And I will point out that many industry-specific applications require that chlorine materials be used, and that's mandated by federal laws.

One commenter did state that we should request a limited scope TR to discover what is required by federal law. And as Francis said in crops, we may look at this across all committees. I think that's a great idea, and we will be taking that up in subcommittee. And the subcommittee unanimously felt chlorine should be relisted.

MEMBER CHAPMAN: Any further discussion on this item? Colehour?

MEMBER BONDERA: Thank you. Thank you, Ashley. For the sake of clarity, since I'm not on the Handling Subcommittee, and it sounded like from your comment just now you were talking about this subject, as we are all aware, may well be crossing subcommittees, in which case it would be something that somehow the Executive Subcommittee would figure out how this were pursued.
I'm curious from your comments if a decision has been made that it would be taken up or looked at, or if you are just stating that you think it should be? It's a suggestion from you or if there has been a decision at the subcommittee level that it, indeed, will be?

Thank you.

MEMBER SWAFFAR: We haven't talked about it in committee, because it came up in this round of public comment. So we will be discussing it at our next committee meeting.

MEMBER CHAPMAN: Real quick, we also noted it as a research priority for the program. So if that's a follow up, Colehour, I'll go back to you. If it's not, then Zea, then you.

MEMBER BONDERA: It's a follow up.

MEMBER CHAPMAN: A follow up. Okay. Colehour, then Zea.

MEMBER BONDERA: Yeah. I think that, you know, I am aware of these things going on. However, it is, I think as I suggested, unclear to me when/if/how/when it is all going to be happening.
at whatever level. And I think everybody might have their opinions, but I'm just curious how it would actually take action versus ideas.

And I'm not specifically saying that to you, Ashley, but as a follow up I'm just wondering how the Executive Subcommittee would handle or will -- plans to handle, or might handle even, this subject area when it is coming from various subcommittees. And I'm just not sure how or when it would be put on what agenda.

Thank you.

CHAIR RICHARDSON: Colehour, if I can take a shot at answering it, I think you have raised a very interesting point in terms of things that are cross-listed in different ways on different subcommittees. So here is how we have planned to try to make it work.

Every subcommittee chair, after this meeting, based on input at this meeting, will have a list of materials that they would like to have on the work agendas for the individual subcommittees. And all of those will go, as in the
normal process, to the Executive Committee at the first meeting following this, which I can't remember the date that it is, but it's in early November.

So all of these suggestions that we are going to be looking for annotations, petitions, possible decisions, or asking for technical reports, whatever may come to the Executive Committee to be discussed. They will have been sent in in writing, so -- and, of course, we copy -- as you know, everything that goes to the Executive goes to all of the Board, all of the NOSB members at the same time. And of course all of our executive subcommittees, as you know, because you sit in on all of them, are open to all of the other Board members sitting on it.

So everybody should know right away which are all of the materials of concern that we are going to try to look at, so that they can be put onto the -- not only onto the individual work agendas of each of the individual subcommittees, but in addition to that we definitely have to
address the fact that there are several materials
that cross subcommittees. And chlorine materials
is one of the main ones; hence, one of the reasons
why we have them put onto our research agenda.

I don't -- right off the top of my head, I can't tell you exactly how we are going to be doing it, but it will be that each of those subcommittee chairs, and the lead people on the chlorine materials and each of the subcommittees, will be in constant communication with each other via email as they begin to develop different work product documents as we go through the next few months.

So, and it will all, obviously, be open and transparent to all members of the subcommittee and NOSB as we are working on that. Does that sort of make you a bit more comfortable as to how we are going to proceed? Because we are pretty serious about being able to, you know, really look at all of these materials and all of the newest information that has come out.

MEMBER CHAPMAN: Thank you. Any -- Zea?
MEMBER SONNABEND: I wonder if this would be an appropriate moment to ask Ashley or Emily, or their department, for an update about electrolyzed water, which is mentioned in here.

MR. McEVOY: Sure. Electrolyzed water, let's see, we had some information from a couple of years ago that different certifiers were looking at electrolyzed water or hypochlorous acid in different ways. So it went into our material review process within the National Organic Program, which is described in one of our policy memos. I can't remember the exact number, but there is a policy memo that describes that there is a discrepancy between certifying agents or material review organizations about whether a material is allowed or not, then we gather the information from the various organizations and make a determination.

In this particular case, I think it was in the summer of 2014, we issued a policy memo that said that electrolyzed water was not on the National List, and, therefore, was not allowed.
After the publication of that, we received a lot of additional information about electrolyzed water, the production of it and hypochlorous acid, and found that hypochlorous acid is the active ingredient in many of these chlorine materials.

So once you put the sodium hypochlorite or calcium hypochlorite into a water solution, and that's the way that it's used in all applications, it dissociates into hypochlorous acid and some other things. Dr. Brines could certainly help me with the technical parts of this, but that's the basic concept is that hypochlorous acid is the active ingredient that is causing the sanitation effect.

So based on this additional information that we received, we issued a memo in late summer that clarified that hypochlorous acid, or this electrolyzed water, is a form of chlorine that is allowed under the existing listing.

We are still asking for the Board to -- there is a petition for hypochlorous acid, so we still are asking for the Board to continue
the review of this, so that this can be more clearly clarified in the future. But that's I guess the background on electrolyzed water.

MEMBER SONNABEND: Clarification, Tom? So, then, can I just ask the Chair that after this vote the coversheet of the recommendation or proposal or whatever include this updated fact, that this would include electrolyzed water while we are reviewing the petition, as I understand it?

MEMBER CHAPMAN: Yes. I will include along the lines of what we have written in the proposal, and I will read it just so everyone is aligned on this.

"The Handling Subcommittee feels electrolyzed water and hypochlorous acid should be allowed under the current listing for chlorine materials, the National List. Electrolyzed water devices generate active ingredients that are equivalent to other chlorine materials on the National List.

"The Handling Subcommittee believes the National List could be clarified in this matter
and is reviewing a petition to explicitly add hypochlorous acid to the National List."

Any further discussion? I'm going to -- before I go to you, I am going to ask for one clarification of what I just read.

Ashley, did you see any comments in the public comment this period about that statement on electrolyzed water or hypochlorous acid?

MEMBER SWAFFAR: I did not.

MEMBER CHAPMAN: Colehour?

MEMBER BONDERA: Yeah. Thank you. I don't want to go on about this for very long, but I just want to say that, from my perspective, even though I understand well enough that there are requirements that chlorine materials do have to be used for certain circumstances and in certain ways and on certain things, that I have -- I think in the end I am going to end up voting against relisting, not because I think that it's not going to -- this isn't going to be relisted, but to point out the fact that this hasn't been, like we have already talked about, dealt with thoroughly
And from the comments that were referred to, you know, there's cases where, you know, what is legally required isn't clear in the listing, and also, you know, what other materials could be used for the same effects, where it isn't legally required to be using chlorine in certain ways is also not there. And so I feel like there is a lot of question marks from my perspective, and I feel uncomfortable as an NOSB member, you know, just leaving the door open for whatever is being used, and whatever is wanted is fine because it all fits in this broader category. I think the broader category is nice, but it's not very specific or looked at very specifically.

And I really -- I can't tell about this chicken and egg question in terms of, yeah, we are going to look at that in the future, but let's renew the sunset now, because we are -- we don't have any choice, like the NOP tells us.

And so it seems like it's this big spiral, and so I just -- I feel a little bit lost.
with the process, but more so I feel like, you know, yeah, maybe in the future that will be done, but what are we doing now.

MEMBER CHAPMAN: Any further comments? Harold?

MEMBER AUSTIN: Thanks, Tom. I think also we should point out that with the implementation of the FDA's Food Safety Modernization Act, that's going to impact all entities in agriculture, whether you're organic or conventional, handling, or produce. And we don't know how significant those impacts are going to be at this point.

So that is one of the other things where I think that is going to have to be part of our consideration down the road, too, the impact of that ruling and what that means to organic producers as well as organic handlers.

MEMBER CHAPMAN: Further comments? Seeing no further discussion on this item, we will move to a vote. The vote is on all the chlorine materials as a grouping. All those in favor of the
motion to remove chlorine materials -- calcium hypochlorite, chlorine dioxide, sodium hypochlorite -- raise their hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: That was two yes, 12 no. The motion fails.

MEMBER CHAPMAN: Next is ethylene.

Dr. Brines?

DR. BRINES: Thank you. The listing for ethylene is at Section 205.605(b) of the National List and reads as, "Ethylene allowed for post-harvest ripening of tropical fruit and degreening of citrus."

Thanks.

MEMBER CHAPMAN: Lisa?

MEMBER de LIMA: So ethylene over both the comment periods the majority of comments were in favor of relisting with no change to the annotation. There was one public interest group that commented that they thought it should be removed, because they believe ethylene is not compatible with organics or essential.
The subcommittee voted unanimously to retain it on the list.

MEMBER CHAPMAN: Any further discussion? Colehour?

MEMBER BONDERA: Thank you. Yeah. One of my favorite topics. I really appreciate it. I think the only thing I want to say is continuous improvement -- and I'm just not sure that I see synthetic ethylene gas going off the list if we aren't seeking continuous improvement in a system that is dependent upon it.

MEMBER CHAPMAN: Any further discussion? Seeing none, we will move to a vote. All those in favor of the motion to remove ethylene from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was three yes, 11 no. The motion fails.

MEMBER CHAPMAN: Next on the National List is ferrous sulfate. Dr. Brines?

DR. BRINES: Thank you. The listing for ferrous sulfate is at Section 205.605(b) of the
National List and reads as, "Ferrous sulfate for iron enrichment or fortification of foods when required by regulation or recommended independent organization."

Thank you.

MEMBER CHAPMAN: Thank you. Tracy?

VICE CHAIR FAVRE: Ferrous sulfate provides iron needed to the body to produce red blood cells. It is used to treat or prevent iron deficiency anemia.

Public comment was divided, was actually pretty limited, though, with some supporting ferrous sulfate remaining on the list while others spoke to the fact that ferrous sulfate should only be used in products that, by law, require fortification.

One commenter suggested ferrous sulfate should be phased out or at least updated with the annotation for iron enrichment or fortification of foods when required by law. It was a unanimous decision in handling to retain the material on the National List.
MEMBER CHAPMAN: Any further discussions? Lisa?

MEMBER de LIMA: I just want to ask that it get added for our discussion back in September -- the annotation.

MEMBER CHAPMAN: So noted.

MEMBER SONNABEND: Yeah. I couldn't hear you there.

MEMBER de LIMA: I just want to make sure that we were going to discuss the annotation possibility in subcommittee.

MEMBER SONNABEND: An additional one besides what already says required by law?

MEMBER de LIMA: No. I was wrong, Zea. I missed that. Thank you.

MEMBER CHAPMAN: Noted again. Jean?

CHAIR RICHARDSON: I mean, I don't know, I'm going to put you on the spot, Tracy. Did we ever look at this phrase where it says just -- it says "required by regulation," which is, you know, okay, so they have to do it, or recommend it, brackets, independent organization. Did you talk
about what the heck that meant?

VICE CHAIR FAVRE: I actually did, luckily. There are -- and I don't have my notes here in front of me on the specific organizations, but there are certain organizations that make recommendations for added health benefits, but that are not raised to the level of regulation and -- but those same organizations are the ones that govern some of the other nutrients, vitamins, and minerals, and things like that that we are seeing in products.

CHAIR RICHARDSON: So maybe Lisa is not so wrong in saying maybe we should look at this at least to give some thought to what that actually means, because there is certainly in the literature recommendations that -- for the use of ferrous sulfate in women of different ages, post-menopausal and otherwise, as to whether or not it should really be deemed required.

So I just really don't fully understand or recommend it. And I think that we should just kind of talk about it in the subcommittee. Whether
we put it on as a work agenda or not, I do think that we should think it through a little bit more. I mean, I'm going to vote to keep it on, obviously, but I just think that it's a little bit odd the way it's written, because it doesn't just limit it to required by law.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: Yeah. I'm actually supportive of looking at the recommended annotation, which is a little -- well, not a little more, it's potentially significantly more restrictive. And I do think it is substantially different than the current annotation, and we do need to discuss it.

MEMBER CHAPMAN: I am going to go with Francis, and then Nick.

MEMBER THICKE: I would point out that there are a lot of advertising organizations that might be thinking they fit under here, too.

MEMBER MARAVELL: I was just going to ask for a little bit of history on this. This is
beginning, and it was meant to apply to certain
professional organizations composed of medical and
dietician experts. But I'm real foggy on that.
So is there any additional expertise on how that
originally came about many years ago?

MEMBER CHAPMAN: Zea?

MEMBER SONNABEND: I'll try, but I
don't know exactly how helpful I'll be. The
general category nutrient vitamins and minerals,
which we will discuss in a little while, there was
some discussion originally about specific
organizations that might be accepted.

But recognizing that the TAP review is
limited and the NOSB didn't really know all these
organizations, only certain examples were given in
the discussion, but when it came time to codify the
regulation, it was left somewhat vague.

Now, this didn't even end up in the
nutrient vitamins and minerals listing on the
National List, and this is where I get foggy. I'm
not sure why it ended up here, but I do think ferrous
sulfate might have been -- it would be included
under nutrient vitamins and minerals.

    So, in some sense, it is a duplicative listing, if that is there. But then it may have been approved afterwards with a different board composition or different discussion, so I don't remember the specifics of this exact one.

MEMBER CHAPMAN: Emily?

MS. BROWN ROSEN: Yeah. My recollection is like Zea's. There was a -- it is a little bit duplicative. I'm not sure how -- why it ended up with this specific annotation in the regulation. But if you go back to the original documents from '95/'96, the nutrient vitamin and mineral one, they talk about also accessory nutrients, which is where all that language was mentioned. So I think it sort of got -- partially got translated into the regulation.

MEMBER CHAPMAN: Thank you. Any further discussion? I do want to note that for the export of flour and bread to Canada, enrichment is a requirement period, and iron is one of those required enrichment materials. So removal of
ferrous sulfate may prevent the export of American bread products to Canada -- flour products.

Any further discussion? Seeing none, we will move to a vote. All those in favor of the motion to remove ferrous sulfate from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is glycerides, mono and di. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List and reads as glycerides, mono and di, for use only in drum drying of food.

Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: So this is one -- I don't really have a strong feeling on this one. We discussed it considerably in the Handling Subcommittee. It has extremely limited use. It's allowed only in the drum drying of food, not
extensively used.

However, from the public comment that we have received from industry and those that use it, they find it to be of a high level of necessity for those areas such as potato -- mashed potato, that type of thing. They find that to be more useful to them than some of the alternatives, which include spray drying, freeze drying, fluidized bed dryers, or air lift dryers. And freeze drying can be sometimes acceptable to drum drying is what we are told, but the preferred mechanism is to use the glycerides.

There isn't a lot of evidence that suggests that it has unacceptable human health or environmental impact. Internationally, the glycerides, mono and diglycerides, are permitted on the Canadian permitted substances list as non-organic ingredients, classified as food additives, but there is -- with the additional annotation, again, for use only in drum drying of products.

And it says also organisms from genetic
engineering are excluded. "Documentation is required and shall be produced from an organic source unless not commercially available" is the international identification.

We obviously -- we have industry supporting retaining it. We don't have a large number of comments on it. We do have some of the -- our consumer groups recommending that it be removed as a potential for health problems, and also in regards that being a potential for alternative.

So, again, I don't have a super strong feeling on this. You kind of have to make up your own mind on it. The subcommittee, after considerable discussion and looking at all of the materials, did vote unanimously to keep it on the list.

MEMBER CHAPMAN: Any further discussion on this item? Calvin?

MEMBER WALKER: Could you all share with me, what are some of the organic alternatives?

CHAIR RICHARDSON: The organic -- or
the alternative mechanisms, it's not -- they are not organic materials, they are mechanisms, such as you would spray dry the material, you would freeze dry the material, such as the potatoes. You'd have fluidized bed dryers or air lift dryers. You could freeze it.

These are some of the alternatives which have been suggested, but not necessarily found to be as functionally the same as the drum drying mechanism using the glycerides.

MEMBER CHAPMAN: To follow up on that, Calvin, when you think of a freeze-dried product, it's like space food, and a drum-dried product is like the dried fruit you find a trail mix?

MEMBER WALKER: Which is the most prevalent.

MEMBER CHAPMAN: I mean, they have different applications, but, you know, those two substances are fairly different. They are both dried fruit products, but they are different.

Any further discussion on this item? Seeing none, we will move to a vote. All those in
favor of the motion to remove glycerides, mono and
di, from the National List, raise your hand. All
those opposed?
The Chair is going to call for a roll
vote on this, roll call vote. And we will start
with Mac, since we missed Mac last time.

MEMBER STONE: No, sir.
MEMBER WALKER: I'm voting yes to
remove.
MEMBER de LIMA: No.
MEMBER BONDERA: Yes.
CHAIR RICHARDSON: Yes.
VICE CHAIR FAVRE: No.
MEMBER SWAFFAR: No.
MEMBER BECK: No.
MEMBER TAYLOR: Yes.
MEMBER MARAVELL: Yes.
MEMBER THICKE: Yes.
MEMBER AUSTIN: No.
MEMBER CHAPMAN: No.
MEMBER SONNABEND: No.
MEMBER CHAPMAN: Sorry, Zea.
VICE CHAIR FAVRE: We had six yes, eight no. The motion fails.

MEMBER CHAPMAN: All right. Next on the National List is glycerin. Dr. Brines?

DR. BRINES: Thank you. The substance is at Section 205.605(b) of the National List and is listed as glycerin produced by hydrolysis of fats and oils.

Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: All right. Glycerin. We've had lots of discussion on glycerin over the last few months, and so I probably won't go on too long with this one. We voted in subcommittee unanimously to retain it on the list.

However, because of all the additional discussion around the issue of glycerin, the Handling Committee is proposing to remove glycerin from 205.605(b) and put it on 606. And so we already have that on our work agenda, and we will be addressing that.

Let's see. The glycerin has been
indicated by industry to be critically essential. And I don't have notes here that tell me what the objections were to leaving it on this -- on the list at the present time. But, as I say, it will be moved to 606.

MEMBER CHAPMAN: Point of information. We have already voted on that. It's not on the work agenda. It's actually with the program for rulemaking.

Any further discussion on this item? Tracy?

VICE CHAIR FAVRE: I handled this for the proposal, Jean, and the only thing I would add is that the reason for suggesting for removal was to encourage more use of organic glycerin, putting it on 606 being a pathway to do that.

MEMBER CHAPMAN: Any further discussion? Seeing none, we will move to a vote. All those in favor of the removal of glycerin from the National List raise your hand. All those opposed? Abstentions? Thank you, Harold.

VICE CHAIR FAVRE: The vote was zero
yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is hydrogen peroxide. Dr. Brines?

DR. BRINES: Thank you. Hydrogen peroxide appears on Section 205.605(b) on the National List as hydrogen peroxide.

Thanks.

MEMBER CHAPMAN: Ashley?

MEMBER SWAFFAR: Hydrogen peroxide has many uses as a sanitizer. The majority of public comment was in support of relisting, and one commenter stated that its advantage is its non-toxic residue. The subcommittee unanimously felt hydrogen peroxide should be relisted.

MEMBER CHAPMAN: Any further discussion? Seeing none, we will move to a vote. All those in favor of the motion to remove hydrogen peroxide from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is
magnesium carbonate. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List and reads as magnesium carbonate for use only in agricultural products labeled "Made with organic specified ingredients or food groups." Prohibited in agricultural products labeled "organic." Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Magnesium carbonate appears to be one of those materials that we could in fact remove from the National List. It is only in -- made with organic, not inorganic. It is specifically prohibited in organic, and oftentimes we sort of bypass things and just say, well, it is only in -- made with organics, so we'll leave it on.

This would be one of the ones where I see that there is not only -- there does not appear to be any necessity based on the information that we have received from the public. But in addition to that, we have received several comments from the
public, from several different groups, public interest groups, recommending removal of this material in this second round of information that we have received.

One of the statements that we received from -- I think it was from one of the certifiers says that it is sometimes found as an additive in salt, but magnesium carbonate has been deemed to have a negative impact on label claims. So, and it was in subcommittee we did vote to -- unanimously to remove this from the list, and such would still be my recommendation based on all of the new public comment that we have received.

MEMBER CHAPMAN: Any discussion on this item? I would like to note that magnesium carbonate is an alternative flow agent to tricalcium phosphate for salt, but because of that label claim is not commonly used. But with its removal, and then our review -- you know, it makes the need for tricalcium phosphate higher.

Any further discussion on this item? Seeing none, we will move to a vote. Again, the
subcommittee here -- Jean, correct me if I'm wrong -- recommended removal unanimously? Correct.

So the motion to remove magnesium carbonate, all those in favor of the motion to remove magnesium carbonate raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was 14 yes, zero no, zero abstentions. The motion passes.

MEMBER CHAPMAN: Next on the list is magnesium chloride. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List and reads as magnesium chloride derived from seawater.

Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Okay. Magnesium chloride. This is a little bit messy in some ways, inasmuch as it looks as though it really ought to be moved into 605(a) based on the public comment that we have received, not only during the first
comment period but also during the second comment period.

It is a material that is used as a processing aid, especially in firming up my favorite food product -- tofu. And the public generally appears to be agree that it should be reclassified as a non-synthetic and moved to 605(a).

So the Handling Committee will be working on this material following this meeting in order to recommend that it be reclassified as non-synthetic, and we may also -- it would be my suggestion that the work agenda also include -- that we consider an annotation, quote, "that it is used as a coagulant in making tofu," since that is the primary way -- think that it is used for, and it is apparently of a high level of necessity in American tofu manufacturing.

That's basically -- let's see. Yes. Several organizations and certifiers recommended an updated TR, and also that it be classified as non-synthetic. A large number of comments on
that.

So we -- I would suggest that what we do is we vote to keep it on the list this time, but that we work on it right away in the Handling Subcommittee, and that it go on our work agenda as soon as we can get that done.

MEMBER CHAPMAN: Thank you, Jean.

Any further discussion on this item? Seeing none, we will move to a vote. All those in favor of the motion to remove magnesium chloride from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: That was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is magnesium stearate. Dr. Brines?

DR. BRINES: Thank you. The substance is included at Section 205.605(b) of the National List as magnesium stearate for use only in agricultural products labeled "Made with organic specified ingredients or food groups."

Prohibited in agricultural products labeled
"organic."

Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Magnesium stearate only in -- made with specifically prohibited in agricultural products labeled organic. Again, this is one of those materials that I don't have a super strong feeling on in terms of whether it stays on the list or not. And we did receive a fair amount of comments on this, especially from the Food Additives Council, you know, IFAC, as well as several certifiers, explaining where it is being used.

Some organizations, the public interest groups sort of remain neutral on this, and one of the organizations stated that because it's in a "made with" category it is really not an issue in terms of impacting organic integrity.

The International Food Additive Council, however, sort of asked that into the record we sort of state the following. "While we appreciate that the Handling Subcommittee has
recommended the substance for relisting, the
meeting materials" -- that's the ones that went out
for the first or the second posting -- "still give
the inaccurate impression that the substance was
removed from Codex due to safety concerns."

So that is not a correct statement. It
was not removed from Codex due to safety concerns,
but there was quite a bit of discussion in Codex,
which is in the IFAC materials that they submitted
to us, to go into sort of the -- you know, the
minutia of the bureaucracy of how these things are
worked on at the GSFSA level.

I further should comment that magnesium
stearate is considered grass and was confirmed as
such at the international level on the review
panel. IFAC is not aware of any organic
alternative to magnesium stearate, and they
strongly encourage the NOSB to relist the material.
Failure to relist would significantly impact and
limit the range of organic supplements that
are -- that remain in high demand amongst
consumers.
It is used typically, you know, as that -- as a flow agent, an anti-caking, in many of the nutrient supplements that you might buy in those jars, and so forth.

So it is sort of -- in subcommittee, the vote was unanimous to leave it on the list with the observation that because it's only made with ingredients -- only in made with products and not in organic -- labeled organic that it does not affect the integrity of the organic label.

MEMBER CHAPMAN: Thank you, Jean. Any further discussion on this item? Seeing none, we will move to a vote. All those in favor of the removal of magnesium stearate from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: Vote was one yes, 13 no. Motion fails.

MEMBER CHAPMAN: The next item is nutrient vitamins and minerals. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the
National List as nutrient vitamins and minerals, in accordance with 21 CFR 104.20, nutritional quality guidelines for foods.

   Thanks.

MEMBER CHAPMAN: Thank you. Zea?

MEMBER SONNABEND: Thank you. This one may take a bit more time than some of the others, because it is quite a complex issue.

I am going to talk first in presenting the issue, and then I will wait for discussion to be called and talk about my discussion points in there.

Because this has such a long history that is a bit convoluted, we have summarized the history of this in the review. In 1995, the NOSB first added nutrient vitamins and minerals to the National List with the following annotation. "Accepted for use in organic foods for enrichment or fortification, when required by regulation or recommended by an independent professional organization."

As we already brought up, the text from
that meeting mentions one or two of those organizations, but the NOSB at the time did not have the resources to find out what those independent organizations might be and the scope of their recommendations.

So when the final rule was published in 2000, it came out with the current annotation instead that referred to 21 CFR 104.20. It was recognized pretty early on that that was not really an accurate citation, and that the current listing should change, and was different -- that the listing was different than the NOSB recommendation.

So, in 2007, the NOP provided an interpretation of this regulation that mistakenly concluded that this 104.20 allowed a wide variety of nutrients that were not limited to just vitamins and minerals.

So, in 2010, the NOP met with FDA to clarify the meaning of this particular CFR listing, and they issued a memo to the NOSB in 2010 that explained the clarification.
Then, in 2012, they published a proposed rule with the intent to change the citation rule from 104.20 to 21 CFR 101.9, and for infant formula, 21 CFR 107.100 and 107.10.

They received a lot of comments on this and ended up going to final rule, but the final rule retracted from what the proposed rule said and went back to the original listing.

And, in the meantime, the NOSB had done a sunset review in which they proposed broadening the list even further, and they got so many comments on the listing -- the proposal out of committee that it was retracted before it got to the Board, and the existing annotation was allowed to keep in sunset.

So the Handling Subcommittee now -- well, as a result of the proposed rule, made it clear that what is known as accessory nutrients had to be petitioned. Many of these were petitioned, and in 2012 and 2013 this Board did take up those petitions, and many of those were not recommended to be allowed. A few of them were, but
many were turned down. The ones that are turned
down are still in commerce, because no action has
been taken on those NOSB recommendations.

So, in 2014, the Handling Committee
commissioned a new technical report, and this was
completed in February 2015. It is very useful
because it clarifies a lot about which substances
are actually required by law and for what purposes,
as well as characterizing all of the different
vitamins and minerals and addressing the OFPA
criteria about them. So it is clear that this
listing somehow needs to change.

We, on the Handling Committee, have
worked on a discussion document to -- that may come
forward at the next meeting, with several options
of ways to change it, including limiting those that
are only required by law, limiting the whole
category to made with organic ingredients groups
only, putting -- what we found from the TR is that
some of these are non-synthetic actually and really
should be on 605(a) and not 605(b). And so part
of the annotation change might have to be to add
some to 605(a).

And the Committee was not in agreement about a proposal at this time, which is why we decided to move forward with a discussion document. However, that discussion document was not accepted for this meeting by the NOP because the agenda is so full at this time.

Well, I don't want to reiterate all of the OFPA criteria, but, in general, the alternatives to the nutrient vitamins and minerals that are added is for people to get their vitamins and minerals from food and/or to choose extra supplements rather than having food that has these supplements in it.

There are non-synthetic supplements such as yeast and other nutritive herbs and things that can provide some vitamin minerals. And we do understand and have taken into consideration that soils have been depleted on time -- over time and even with organic management may be far more -- less rich in vitamins and minerals than they were, say, 50 years ago or in the past.
We took a look at the ancillary substances, but realized that there are so many of them, particularly in the vitamins, that we are not prepared to bring forward an ancillary substance proposal at this time. Once we work out the ones on the table, then we will proceed to bring forth some of the other materials that -- for ancillary substances.

And I will stop there for the discussion portion.

MEMBER CHAPMAN: Thank you, Zea. Miles?

MR. McEVOY: Yes. Just a point of clarification. The chronology that you talked about was very complete and accurate, except for there was no final rule that was issued. It was an interim rule that was issued in September of 2012, which means that the proposed rule that came out in January of 2012 is still on the table. We never finished the rulemaking.

Now, the reason why we issued an interim rule is because, basically, we ran out of time.
because of the sunset date that was occurring in 2012. So what the interim rule did was continue the listing as listed, but that proposed rule is still on the table and still under consideration for final rule action by AMS.

MEMBER CHAPMAN: Any discussion? I will start with Nick, then Jean.

MEMBER MARAVELL: Yeah. Just a quick follow up. For those of us who don't quite get into the minutia of rulemaking, what is the distinction between an interim rule and having a proposed rule pending at the same time? And is there terminology called an interim final rule as well?

MR. McEVOY: Yeah. I think this is -- maybe this is an interim final rule. But what it does is it is effective, but it does not take the proposed rule off the table.

MEMBER CHAPMAN: Zea, do you have a clarification?

MEMBER SONNABEND: This is a question for Miles. And so what, then, is the status of the petitioned infant formula items like lucene and
lycopene and all of that at this time?

MR. McEVOY: Well, those petitions that were recommended for addition to the National List, like DHA and ARA, we have not initiated rulemaking on those, to add those to the National List. Those petitions that were not recommended for addition to the National List of course we will not engage in rulemaking to -- on those items, because they were not recommended for addition to the National List.

So AMS's work is to finalize the rule, based on the proposed rule that was issued in January of 2012. We have not completed that work.

MEMBER SONNABEND: But I guess I mean, what about those things that were not voted to be added to the National List but are still in commerce?

MR. McEVOY: Right. We are not taking rulemaking action to add those to the National List.

MEMBER SONNABEND: How about getting them out of commerce?
MR. McEVOY: The interim final rule is the rule that is in effect, which has the same citation as previously to the 21 CFR 104.20. So there was no change in terms of the allowances of these substances. So we have to complete that rulemaking.

MEMBER CHAPMAN: Nick, is it a follow up to this?

MEMBER MARAVELL: And just to complete this discussion, so that an interim final rule does not ever expire or need to be changed until it is superseded. Is that correct?

MR. McEVOY: Yeah. That's my understanding.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Zea, some of the public comments suggested that we, instead of having a blanket group like this, that we look at each of them separately. In terms of the research that you did in putting together this extensive analysis that you did for these, how do you feel about that? It sort of seems to make sense to me.
MEMBER SONNABEND: Okay. I will launch into my personal opinion on this discussion. I'm going to quote first. "Some folks trust to reason; others trust to might. I don't trust to nothing, but I will hope it comes out right."

I believe that this is going to be an unsolvable problem from our Board at this point. I am going to try my best -- if this is retained in the sunset process, I am committed to working on a discussion document to lead to a proposed annotation change.

My personal opinion is to go back to the original NOSB recommendation and leave it only to those required by law, which is the infant formula section, and it's Vitamin A and Vitamin D in milk, and very few others. Iron, as Tom mentioned, for enrichment claims, and very few others, which we do finally have access to some of that in the TR. And require that everything else be petitioned.

Supplemental to that, I do think -- you know, I personally think this is what the made with organic category was created for, that consumers
should be able to choose if they want their food fortified with synthetics or not. And if it's made with organic, then they can assume -- you know, they can have confidence in all of the organic portions, and then knowingly choose the synthetic vitamins.

I did not hear support for that from the consumer groups, but if we put that out in a discussion document we may hear some people in support of that.

I do think that our previous actions are being stonewalled. I do not blame Miles or Emily or anyone in the NOP. I think it is coming from corporate pressure from higher up in the USDA. I have no evidence of this -- after all, I am a scientist -- but I know mumbo-jumbo when I hear it.

And, therefore, I am going to vote against renewing this at sunset and try to take -- try to encourage those people who need to petition for Vitamin A and D, and the like. And I'm sorry, Kelly and Beth and Albert, but try to accelerate those petitions as much as possible, because I can almost guarantee from past experience
that if we do vote this off, it's not going to end
up off by 2017, just like sodium nitrate still isn't
off.

And so I think there will be time to
create the petition and to get it through for those
things that really need to be and are required by
law.

So that is my full opinion at the
moment.

MEMBER CHAPMAN: Next, I have
Colehour.

MEMBER BONDERA: Yeah. I haven't been
involved in these detailed discussions. Frankly,
I am not on the Handling Subcommittee, but I just
want to say that I concur with what I just heard
Zea say, because my biggest concern and question
from reviewing this information has been -- I
hesitate I guess where the -- essentiality isn't
exactly the right word, but, you know, which things
are necessary and in what ways and how these are
all grouped together.

But after what Miles said, after this
discussion here, it's even more clear to me that, you know, yeah, we approve -- we renew some sunset, and then it sits there for five more years being allowed, and the other stuff that we are doing, as a committee, may or may not get acted upon and, like Zea said, may or may not be, because NOP or NOP staff isn't taking action, but it may be blocked other ways.

And so, from my perspective, the action that is appropriate is to delist, and alternatives of process do exist, so I just wanted to say I am right there. We are together.

Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Remember my opening comments? I said that we are going to balancing the hardships here, and sort of an issue of equity almost in what we're looking at, because I would like to point out to everybody that the Voting Subcommittee was in fact unanimous to leave it on the list.

And so the message that we sent out to
the trade and industry and users of these materials was that despite the -- and I should be sure everyone understands we spent a lot of time on this in the Handling Subcommittee, and it is not simple. As Zea said, it's very complicated.

But certainly in terms of the public getting adequate information, they will have been assuming that we were probably not going to take the step of removing, and yet based on the public comment that has come in since then, and further analysis, it is certainly -- several of us will be voting to remove.

So just a cautionary statement.

MEMBER CHAPMAN: Nick?

MEMBER MARAVELL: Yes. Thank you, Zea, for giving us that background and your personal opinion. I just want to continue on with the process a little bit more, because I, too, intend to vote to delist.

However, I would like to get some understanding from the program that a recommendation, fully approved by the full Board
to delist at sunset, would have what legal -- and
a mandatory impact, if any, on the decision of the
Secretary.

MR. McEVOY: Sure. When the NOSB
makes a recommendation to remove a substance from
the National List, then we have to go through
rulemaking to implement that. So the first step
is to develop the proposed rule to propose that the
substance comes off the National List, and that
would be followed by opportunity for public
comment, and then the issuance of a final rule.

MEMBER MARAVELL: Could the Secretary
decide not to follow the advice of the NOSB and
issue a proposed rule to delist?

MR. McEVOY: Right. The Secretary
could decide not to issue a proposed rule based on
the recommendation.

MEMBER MARAVELL: Thank you.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: I do just want to
clarify to those not on the Handling Committee that
many of the things under this category are on the
National List individually already. So ascorbic acid, tocopherol, ferrous sulfate, there are a number of calcium minerals, many of these things are already on the National List. So if we voted down -- you know, the key ones that need to be petitioned are Vitamins A and D in milk and -- or, I don't know, A is in fruit juice I think.

But the infant formula ones, which could possibly come in as a group, or we could also, within the NOSB, try for an annotation change specific to infant formula one.

MEMBER CHAPMAN: Okay. So I am going to speak, and then I have I guess Jean, Harold, and Tracy.

So I have a question for those who are thinking of delisting this item. Have they thought through the impacts this would have if manufacturers who use -- organic manufacturers who use vitamin supplementation choose to then drop organic and what size of impact that would have on the organic industry as a whole and the farmers that supply those products?
I'll leave you guys to percolate on that question as I go to the next. Jean?

CHAIR RICHARDSON: I was kind of going to ask that question. Zea, could we accomplish -- again, I am sitting here worried about this, the fact that we voted unanimously to leave it on the list. And so the message that we have sent out there so far is that we are not going to remove it.

So I'm struggling here to say, could we accomplish the same thing by working on it right away in the subcommittee in terms of the necessary annotations?

MEMBER SONNABEND: First of all, Jean, you didn't bring this up when we were talking about seaweed and fish for the Crops Committee, which were unanimous out of committee and people wanted to remove them at the spur of the moment.

But, yes, I am committed to working on it, if it stays on the list. But I do feel that there is a certain amount of stonewalling of it going on. And that might happen, whether we take
it off or try to leave it on and fix it, but I'll
work on it either way for the rest of my term. But
I bet you it is not fixed by the end of my term.

MEMBER CHAPMAN: Harold?

MEMBER AUSTIN: As one of the two
handlers sitting on the Board, I am going to be in
support of the continued listing of this class for
the time being. We have had lengthy discussions
about this I think ever since we got onto the Board,
Zea.

And I think Jean puts forth a valid
point that the motion coming out of the
subcommittee was unanimously in support of it. I
think we are going to catch the producers and
manufacturers off guard, those handlers that have
been using this classification, these materials,
and I think that would be a huge disservice to throw
them this type of a curveball or blindside at this
juncture.

I think part of the solution is to
continue and to move forward working on the
discussion document and finding a course of action
that we can take this and carry it through, hopefully before our group retires next fall.

It is a complicated issue, but it is one that has been going on for a while. And I think if we move to delist at this point in time, we are doing a big disservice with all of the energy and efforts that have already been put into it up to this point.

So I'm going to be in support to continue to keep them on the list at this time.

MEMBER CHAPMAN: Tracy?

VICE CHAIR FAVRE: Actually, I agree with the comments that have been made by Jean and Harold and others. Just an observation. Has anybody else noticed that the squirrelly listings of groups of materials were the ones that caused problems, like inerts and sapients and vitamins and minerals and things like that?

I am actually in favor of individual listings. However, just like with ethylene, we've got producers that are relying on this. And whether they are big producers or small producers,
the basic tenet for me is the same. It is -- I think it's unfair to jerk the rug out from underneath without some clear indication about what we intend to do.

I personally will vote in favor of continued listing, but I definitely want to see an annotation to limit it to those required by federal regulations, and then encourage petitions for the individual materials.

MEMBER CHAPMAN: So I am going to go to Miles, and then Nick.

MR. McEVOY: Yeah. Just to add a little bit more to AMS's plans around rulemaking on this. So when we issued the proposed rule in 2012, we got a substantial amount of comments. This is a significant rulemaking action, because it has a lot of impact on all of the operations that are utilizing nutrient vitamins and minerals in their products currently.

And then, because of the number of comments, we did not finish the final rule before the sunset date and had to go to the interim rule,
which also we received a number of comments on that as well.

Subsequent to that, there are a number of recommendations that came in from the NOSB on these types of products on an individual basis. And so incorporating that into a final rule, both the new recommendations and the old proposal, is a substantial amount of work.

What we have done is, in the interim timeframe, is focused on some other rulemaking actions. So for next year there is a number of things from older NOSB recommendations on aquaculture, agriculture, pet food, animal welfare. I think that's the plan is to have those things very well -- long origin of livestock as well.

But we do have these outstanding actions on nutrient vitamins and minerals, as well as sodium nitrate that we also need to get to. They are not on the immediate work plan for the National Organic Program because of these other rulemaking priorities, but we are certainly going to take that
on as soon as we have the -- as soon as these other rulemaking actions move forward. These are the next in line for action by the Department.

MEMBER MARAVELL: Yeah. Just to continue the process along a little bit more here, given that an action to delist voted on by the full Board is advisory and not mandatory for the Secretary, and given that the Secretary has discretion here and could phase in any changes that would be subsequent to another proposed rulemaking, I think you could take the sentiment of the Board, which is nobody here wants to disrupt the strain of commerce or pull the rug out from anybody, and we never have.

What we are looking for is, you know, to provide some very specific -- more specific guidance. As Tracy was saying, we run into these problems when we just say, "Ah, yeah. There's a whole group out there of things." And so we are just doing our due diligence and trying to correct things.

So I would respectfully ask that we be
allowed, if we do vote to delist this, or whether we don't vote to delist this as a decisive action, that we perhaps would want to pass a resolution to state that we -- you know, this is an effort to correct the situation that needs to correcting, as Zea has so eloquently pointed out. And we have no intention whatsoever of pulling the rug out from anybody, and that any changes must be deliberate and phased in, so as to minimize any market disruption.

MEMBER CHAPMAN: I'll go with Mac, then Zea.

MEMBER STONE: Well, I'm not willing to play chicken with the Secretary. I feel like we should keep -- if we keep the ball in our court, then we're in control of the conversation and making a better decision over time of how to dissect this conversation into a workable plan.

MEMBER SONNABEND: Yeah. I don't know about playing chicken with the Secretary, because I don't think he pays attention to us on a daily basis. But I do consider my vote a protest vote
for the 20 years of the Secretary ignoring the NOSB recommendations.

And realizing that it will not probably change things, and there will be enough time for everyone to come into compliance and for the necessary things to be petitioned and individualized, but if we don't start now to make our intentions and desires clear to the Secretary, then it will be another five years.

MEMBER CHAPMAN: Any further discussion on this item? As a handling company that utilizes these materials, two years would not be a sufficient amount of time for us to change a product. A plan change for us is a minimum of 18 months. And I do fear the impact this would have on the organic community, if companies like mine came to the conclusion that we would not be competitive without use of these products.

We are a large purchaser of organic products, and the effects that has on the marketplace when someone exits it is fairly dramatic, as has happened with dairy companies who
have chosen to go natural. And that affects real lives, so keep that in mind as you consider this vote.

Any further discussion? Jean?

CHAIR RICHARDSON: I am sort of persuaded that we ought to do what the general consensus looks like it's headed towards, which is that we should really be working on it in subcommittee, and that we may have the best option to write something which is crisp and clear, clearer than perhaps some of the rulemaking.

And given the fact that we have not really indicated to the manufacturers out there that we were likely to take this off the list, although, as we all know, it takes a long time for anything to happen in D.C., that we ought to leave it on the list and be working on it in subcommittee rather than all of us protesting what we really feel we want to do.

MEMBER CHAPMAN: Any further discussion? Seeing none, we'll move to a vote on the item.
MEMBER SONNABEND: Request a roll call vote.

MEMBER CHAPMAN: Yes. So we will move to a roll call vote. I believe we will start with Lisa in this case. And the motion is to remove nutrient vitamins and minerals. A yes vote is to remove; a no vote is to remain.

MEMBER de LIMA: No.
MEMBER BONDERA: Yes.
CHAIR RICHARDSON: No.
VICE CHAIR FAVRE: No.
MEMBER SWAFFAR: No.
MEMBER BECK: No.
MEMBER TAYLOR: Yes.
MEMBER MARAVELL: Yes.
MEMBER THICKE: Yes.
MEMBER AUSTIN: No.
MEMBER SONNABEND: Yes.
MEMBER STONE: No, sir.
MEMBER WALKER: Yes.
MEMBER CHAPMAN: No.

VICE CHAIR FAVRE: The vote was six
yes, eight no. The motion fails.

MEMBER CHAPMAN: Next on the list is ozone. Dr. Brines?

DR. BRINES: Thank you. The listing for ozone is included at Section 205.605(b) of the National List and reads as ozone.

Thanks.

MEMBER CHAPMAN: Thank you. Ashley?

MEMBER SWAFFAR: Ozone is used for a disinfectant in post-harvest treatment for produce. Almost all comments came in in support for relisting of ozone, stating that ozone is an important tool for sanitation, and the subcommittee unanimously felt that ozone should be relisted.

MEMBER CHAPMAN: Thank you. Any discussion on ozone? Hearing no discussion on ozone, we will proceed to a vote. All those in favor of the motion to remove ozone from the National List, raise your hand. All those opposed? Abstain? The Chair notes the absence of Colehour.
VICE CHAIR FAVRE: Jennifer, I didn't see your vote.

MEMBER TAYLOR: I will vote to keep it.

CHAIR RICHARDSON: Could you state your vote out loud, Jennifer, so folks can hear?

MEMBER TAYLOR: Yes. I would vote to have it remain on the list.

CHAIR RICHARDSON: Jennifer voted to have it remain on the list.

VICE CHAIR FAVRE: We had zero yes, 13 no, one absent. The motion fails.

MEMBER CHAPMAN: Next on the list is phosphoric acid. Dr. Brines?

DR. BRINES: Thank you. The substance is included at Section 205.605(b) of the National List and reads as phosphoric acid, cleaning of food contact surfaces and equipment only.

Thanks.

MEMBER CHAPMAN: Ashley?

MEMBER SWAFFAR: Phosphoric acid is used for cleaning food contact surfaces, and several commenters stated that phosphoric acid is
critical in our food safety program. There was one commenter that had concern that phosphoric acid could pose environmental concerns, but stated because its use is slightly different from other materials, there may not be a more compatible substance on the list, and they encourage us to seek safer alternatives.

The subcommittee unanimously felt phosphoric acid should be relisted.

MEMBER CHAPMAN: Any further discussion of this item? Seeing none, we will proceed to a vote. All those in favor of the motion to remove phosphoric acid from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: Jennifer, I didn't see your vote.

MEMBER TAYLOR: I'm sorry. I voted to have it removed.

MEMBER CHAPMAN: She voted yes.

VICE CHAIR FAVRE: You did?

MEMBER CHAPMAN: Jennifer Taylor voted
to remove, and the Chair notes Colehour is absent.

VICE CHAIR FAVRE: Okay. We had one yes, 12 no, one absent. The motion fails.

CHAIR RICHARDSON: All right. I think Tom would just keep going, but I am going to cut him off now, now that he is on a roll.

I'd like to take a break now for lunch of 75 minutes. If you'd come back -- what does that bring us to? 1:00. 1:30. See, I can't do math anymore. 1:30 back to start again. 1:30.

(Whereupon, the above-entitled matter went off the record at 12:13 p.m. and resumed at 1:46 p.m.)

CHAIR RICHARDSON: All right, everybody. We can get started. We will be able to continue on with the Handling Subcommittee, their presentations on the handling materials.

And I will, at this point, first ask for some clarifications on conflict of interest from Dr. Brines that came up following a statement that Tom made this morning and ask for that clarification from Dr. Brines on the record,
please.

DR. BRINES: Sure. Thank you. So there was -- the question was whether a user of material that is on the National List would have a conflict of interest in discussing their voting on that particular material.

And as the Board members are appointed as representatives, being a user of the material on the National List does not present a conflict of interest. If, however, a member were a producer of one of the materials on the National List and had a stake about whether that material was listed or delisted, that would constitute a conflict of interest, but using a material on the National List is not a conflict of interest.

Thank you.

CHAIR RICHARDSON: Thank you, Lisa. I will turn the meeting now over to the Chair of the Handling Subcommittee, Tom Chapman.

MEMBER CHAPMAN: Thank you. And I am just going to read my conflict of interest statement that I provided to the Board, as well as
the program.

There are materials on the October 2015 NOSB meeting agenda that are in use or have been considered for use in Clif Bar & Company's supply chain. Clif Bar & Company is not a seller, exclusive buyer, nor do any of these materials directly or disproportionately benefit me or a person associated with me.

They do not impair my objectivity in representing handlers, nor do they have the potential to create an unfair competitive advantage. And so they do not mount to a conflict of interest per the 2013 NOP memo on conflict of interest.

Thank you.

And I'm acknowledging that Harold Austin is also part of the meeting.

And with that, we will return to the agenda. And I believe the first material we have is potassium acid tartrate. Dr. Brines?

DR. BRINES: Thank you. This material is included at Section 205.605(b) of the National
List as potassium acid tartrate.

Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Thank you. This material is a byproduct of the wine-making industry. It is used in baked goods. There is general broad support for this material. It is one of those sort of cream of tartar type materials. Some of us might use it in our kitchens, although I actually don't.

But, anyway, it is strongly supported to be retained on the list as a leveling agent, considered to be necessary, or I think they use the word essential but necessary for many businesses. A number of certifying entities, agencies, like the CCOF, stated that they had a number of users that use this material in their production.

Fetzer Wines indicate that it is necessary for wine production, and without out you would get tartrate crystals in the wine. That would not be a good thing.

Beyond Pesticides stated that we
should -- the Handling Subcommittee should consider reclassifying this material as a non-synthetic and move it to 605(a). And so this will be one of the items that we will -- that I would request that the Chair of the Handling Subcommittee puts this on our agenda to look at and consider when we go into our next session of working after this meeting.

The Voting Subcommittee was unanimous to keep this material on the National List, and I haven't seen any evidence coming into us in the last comment period to suggest anything other than putting it on the list.

Thank you.

MEMBER CHAPMAN: Any further discussion on this item? Seeing none, we will move to a vote. All those in favor of the motion to remove potassium acid tartrate raise your hand. All those opposed? Abstaining?

VICE CHAIR FAVRE: That was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is
potassium carbonate. Dr. Brines?

DR. BRINES: Thank you. The listing for potassium carbonate on the National List is at 205.605(b), and it is listed as potassium carbonate.

Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Potassium carbonate -- this material is used in the Dutch alkali process for processing cocoa and chocolate to reduce acidity, and in soft drinks and confections, and is a buffering agent in making wine and mead. And, as I noted in my earlier comments, it is used to tenderize tripe. My Dad used to love that.

We received some, but not a lot, of public comment. A number of both certifiers and producers stated that they have no alternatives. I have -- I count three or four of those. And, alternatively, Beyond Pesticides suggested that it may not be an essential material, although based on the input that we had from producers who are
using it it does seem to be used.

In subcommittee, we had a unanimous vote to leave it on the National List, and I don't see any particular reason to take it off at this point.

Thank you.

MEMBER CHAPMAN: Any further discussion on this item? Seeing none, we will move to a vote. All those in favor of the removal of potassium carbonate from the National List raise your hand. All those opposed? Abstentions?

VICE CHAIR FAVRE: That was one yes, 13 no. The motion fails.

MEMBER CHAPMAN: Next on the list is potassium citrate. Dr. Brines?

DR. BRINES: Thank you. This substance is listed at Section 205.605(b) of the National List as potassium citrate.

Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Potassium citrate is an alkaline salt manufactured by adding
potassium bicarbonate and potassium carbonate to citric acid, so it's an alkaline salt used as a pH adjuster primarily.

It should be noted that this material, potassium citrate, can be used to replace some of the phosphates in processing. And so over time this perhaps may be more critical to us, inasmuch as we are looking at phosphates with a bit of a fine attention to detail over potential health effects.

The public comment broadly supported keeping this material on the list from both OTA and the consumer groups, and there was no strong indication that this should be removed from the list. The Voting Subcommittee was a unanimous vote to keep this material on the list, and I have seen nothing in public comment coming in that would suggest that we should do other than leave it on the list at this time.

Thank you.

MEMBER CHAPMAN: Any further discussion? Seeing none, we will move to a vote on this item. All those in favor of the motion to
remove potassium citrate from the National List
raise your hand. All those opposed?
Abstentions?

VICE CHAIR FAVRE: The vote was one
yes, 13 no. The motion fails.

MEMBER CHAPMAN: Next on the list is
potassium phosphate. Dr. Brines?

DR. BRINES: Thank you. This
substance is included at Section 205.605(e) of the
National List as potassium phosphate for use only
in agricultural products labeled "Made with
organic specified ingredients or food groups."
Prohibited in agricultural products labeled
"organic."

Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Potassium
phosphate -- this is one of the phosphates that
Harold and I have spent a lot of time looking at
over the last few months. I won't repeat all of
the comments that Harold Austin made earlier over
calcium phosphate, but many of the comments that
he made and read into the record apply also to the potassium, and then subsequently to the sodium phosphate that I will be looking at later on.

The potassium phosphate is only on the list for made with organic, and it is prohibited in agricultural products labeled "organic." So, therefore, it does not necessarily directly impact the organic label. It does -- it may, however, have some potential health effects as we have discussed at some length already today, and others may wish to comment on this in a minute or two.

I should note that it is -- has been determined to be grass, that it is used as an efficient pH buffering to many products, and it also provides some potassium and phosphorous to the product, both of which are materials that the body needs.

Several of the industry people have commented that there are no organic alternative substitutes or practices that would make these substances unnecessary.

One of our consumer groups states the
following. "The NOSB should seek to eliminate the use of inorganic phosphates in organic food. If it's not totally possible to eliminate them, the listing should be annotated to eliminate uses prohibited by 205.600(b)(4)."

As you know, we are requesting -- we have requested a technical report, which we should have in a few weeks' time, and that will enable us to evaluate this and all of the other phosphates as a group in order to determine if any further annotations or petitions might be needed.

Again, though, I do comment that it is in the "made with" category. There are some of the businesses that told us that without this you would get an impaired mouth feel for some of the foods that are presently on the market as processed foods, and they would prefer to see it listed on the list.

I don't have a strong feeling for this one, obviously, because it's only in the "made with" category. And as you can see from -- if you have looked at our subcommittee vote, it as a
scattered vote. Three said yes, remove; two said no, don't remove; and one abstained; and one was absent. So it is one of those ones for which discussion and perhaps a roll call vote may be needed.

MEMBER CHAPMAN: Thank you.

MEMBER de LIMA: So, in subcommittee, I had originally voted to remove, and this was before we decided in subcommittee that we were going to ask for a TR and look into reevaluating all of the phosphates as a group.

So I'm going to switch my vote to retain it, so that we can look at everything at once and make sure we can annotate properly.

MEMBER CHAPMAN: I have a question for Jean. The commenter who referenced Section 600 -- 205.600(b), did they make mention to the use of this material as a processing aid or adjuvant?

CHAIR RICHARDSON: No.

MEMBER CHAPMAN: Any further discussion? Colehour?

MEMBER BONDERA: Yeah. I'm sorry.
Jean -- and I apologize if you already said it -- but was there public opposition to the relisting that I missed when you presented?

CHAIR RICHARDSON: Yes. It's one of the phosphates.

MEMBER CHAPMAN: Any further discussion? Seeing none, we will move to a vote on this item. All those in favor of the motion to remove potassium phosphate from the National List raise your hand. All those opposed? Any abstentions?

VICE CHAIR FAVRE: Okay. The vote I had was two yes, nine no, three abstentions. The motion fails.

MEMBER CHAPMAN: Thank you. The next item is sodium citrate. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List and is listed as sodium citrate. Thanks.

MEMBER CHAPMAN: Sodium citrate?

Ashley?
MEMBER SWAFFAR: Sodium citrate is used as an emulsifier in dairy products to keep fats from separating, and in cheese-making where it allows to melt without becoming greasy.

All public comments received was in support for the relisting of sodium citrate, stating there is not any -- there are no other alternatives, and it is essential.

The subcommittee unanimously felt sodium citrate should be relisted.

MEMBER CHAPMAN: Thank you. Any discussion on this item? Seeing none, we will move to a vote. All those in favor of removing sodium citrate from the National List raise your hand.

All those opposed? Abstentions?

VICE CHAIR FAVRE: The vote was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: I failed to note that we just passed the halfway point with this group.

Next item is sodium hydroxide. Dr. Brines?

DR. BRINES: Thank you. Sodium
hydroxide is included at Section 205.605(b) of the National List and reads as sodium hydroxide prohibited for use in live peeling of fruits and vegetables.

Thank you.

MEMBER CHAPMAN:  Jean?

CHAIR RICHARDSON:  Sodium hydroxide -- specifically prohibited, please note that for live peeling of fruits and vegetables. It is a caustic material. It is used as a processing aid that is particularly important in pH adjustments to the production of pretzels and chocolate.

It is often also used as a cleaning agent, but it is documented that it has to be followed by a rinse, if it is going to be used for that use. It has quite a broad range of uses, and we -- and it can also be used in making -- the hominy corn maize kernels being reconstituted to make grits.

We have not received anything that really would suggest us taking this from the list.
We do know that it is broadly used. We didn't get a lot of comment on this. And the subcommittee vote was to keep it on the list by unanimous vote at that time, and I can't see a specific reason, or based on anything that has come into us, why we should not just leave it on the list at this time.

MEMBER CHAPMAN: Any further discussion? Seeing none, we will move to a vote. All those in favor of the motion to remove sodium hydroxide raise your hand. All those opposed? Abstaining?

VICE CHAIR FAVRE: The vote was zero yes, 13 no, one abstention. The motion fails.

MEMBER CHAPMAN: Next on the list is the sodium phosphate. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.605(b) of the National List as sodium phosphates for use only in dairy foods.

Thanks.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Thank you. Sodium
phosphates -- again, another one of this phosphate group that, as you know, we are going to be taking back to subcommittee. And we have the technical report that we are going to be reviewing.

And just in response to some of the questions that I received sort of in the last few hours from people who have provided us with comment, the clarification on that technical report, we have asked specific questions, very directed and focused, based on the public input and public comment that we received after the first set of public comment on this material over the summer.

So the TR is going to be -- is being -- the folks writing it are supposed to be specifically answering these directed questions. So it's not just like a general, what do you think of phosphates, guys? It's very -- it's focused on what it is that we're looking for from a human health point of view.

We received this study on phosphates for use only in dairy food, and we did receive a considerable amount of public comment on these
materials. Let's see. This is -- we received suggestions to remove from a number of the consumer groups. Quite a lot of it is based on the human health aspects.

And one of the human health aspects from sodium phosphates specifically is one that comes from an older TR that it says the toxicity of sodium phosphates is generally related to sequestration of calcium and subsequent reduction of ionized calcium. And that is one of the sets of questions that we are going to try to clarify in the TR that we have asked for.

A number of industrial uses of this material in processed foods are as follows. It is essential in making processed organic cheeses. Another company says it is essential in the production of yogurt smoothies, inasmuch as the sodium phosphate ionizes in solution which helps prevent excessive protein--protein interactions, protein-to-protein interactions in the base that would result in curd formation and helps to keep this an edible product for the consumer.
Without this material, this product may have to be discontinued. This same processor goes on to say, "We are glad the subcommittee has taken the steps of commissioning a technical review to better understand the potential health effects of cumulative phosphate intake that might result when people eat multiple products containing sodium phosphate and other phosphates as additives."

In response to the subcommittee's question, this company states -- we asked, remember, if it was on the -- is it on the ingredient panel or does the consumer have any idea of knowing it there. This consumer stated that sodium phosphate is listed on the ingredient panel of the product.

Okay. Let's see. We have received other comment from producers saying sodium phosphates work as emulsifiers to provide smooth texture and also stabilizes the proteins and prevents separation of oil in certain kinds of cheese powders.

There is not a suitable alternative to
this material. And so, therefore, there is a strong industry request that this material at this time stays on the National List.

In subcommittee, our vote was one person voted to remove, four voted to keep it on the list, and one abstained.

MEMBER CHAPMAN: Thank you, Jean.

Any further discussion on this item? Colehour?

MEMBER BONDERA: Thank you. I guess I just want to put in the record the fact that I am going to be voting against the relisting of this item, and I think it goes along, like Jean said before, on these phosphates, because I personally think, based on my experience and observation, that this process that we are -- we, the NOSB, are going through and not being able to review items and annotate and have the information before relisting, I think is baroque and cumbersome and dysfunctional.

And I think that I need to file a protest vote, and then that would -- for that reason, I will
be voting against it, even though I understand the needs that Jean just explained.

    Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Just a clarification. On the annotation, while I appreciate Colehour's perspective, and I think that I thought the same way not so long ago, but I have come to realize that what happens is that if we sit at this meeting and come up with a brilliant annotation, as we certainly could sitting around this table, based on what we now know after today's meeting, however, if we did that annotation right now and attached that to the sunset document right now, which is the way we used to do it, the broader publics that are not here present at this meeting today would not know what we were doing. And, therefore, we would have failed in our duty to be transparent.

    And so I actually think that what we are doing by saying we are going to take it back to subcommittee and come back and send out yet
again -- out to the public further potential changes or not, as it may be, allows a broader range of transparency to a broader range of the public, to give us yet more public comment.

MEMBER CHAPMAN: Nick?

MEMBER MARAVELL: What we used to do when I joined the Board is we would come up with annotations on the second day, and we would go out on the third day, and sometimes the fourth and the fifth, for more public comment.

And I believe in those early days we were also trying to stream this. We had a camera and all of the proceedings and everything we did, including the screen with proposed new language, was on the internet. And we would try to be very responsive to the public, and, indeed, as we have seen here, sometimes -- for example, the issue of ethylene -- we totally changed the committee recommendation right here.

Well, we were able to do that in the past during the meeting with public input. So I think there are multiple ways to go about this. The way
you have described is one way, but we used to do it differently.

MEMBER CHAPMAN: Colehour?

MEMBER BONDERA: Thank you. And thank you, Nick, for your comment. I think in response to what you said, Jean, I don't disagree either. I think that, like you said, that's one way to do it. I do think that, you know, the conceptualization of having two sessions for hearing a sunset item could and should be ample time, in my opinion.

And I know there is always reasons why it's not -- to have requested, have received a TR, have prepared an annotation, have gone through that process, including with sufficient public input.

And, frankly, if for some reason it's not, which I could understand that as well, then I think that administratively there needs to be something in place so that these things could be postponed to a third meeting, which has been eliminated. And so there isn't that option or opportunity in terms of us not voting on these
sunset items and incorporating that.

And so I just am saying that the process is -- from my perspective, like you said, maybe it can be figured out, but it doesn't settle very smoothly.

Thank you.

MEMBER CHAPMAN: Miles?

MR. McEVOY: Yeah. Just a point of clarification. There were a couple of meetings where we did do live streaming of the meeting. I think we did that twice. But there was no way for the folks that were seeing the meeting through live streaming to actually provide public comment.

So, but that was done at a few meetings. The cost of that was very high, and actually not very many people, in terms of the usage data, were actually looking at the live streaming. So for that reason, we stopped doing that.

But now we are actually looking at maybe doing that again, in terms of the live streaming component, because the cost of that has come down significantly. So --
MEMBER CHAPMAN: Nick, then Colehour.

MEMBER MARAVELL: No. There was no interactivity, and I didn't mean to imply that. However, we all have these cell phones. And if something went out over the screen, people in the audience would hear from the field. So, I mean, there was an imperfect but not transparent way to get some feedback.

And perhaps we were operating more in the, what should I say, the old days when things happened in the room so to speak. But I'm just saying that there are other ways to do it, and I'm glad to hear that you are considering opening this up, so that people can see it live. I think that would be great.

MEMBER CHAPMAN: Colehour?

MEMBER BONDERA: Thank you, and thank you for entertaining this process. I apologize for taking up extra time.

However, I do think what Jennifer Taylor presented to us earlier is worth bringing back up again, because when I was Chair of Policy
Development Subcommittee we did -- and I'm not quoting exactly, but it has been a good two and a half years. So it isn't last week or anything.

We did make a fully supported recommendation that the whole NOSB voted for to have an open docket, so that there was public input possible all the time, so we weren't waiting for some three-week window in some theoretical future.

And I really encourage the NOP to really put out the energy to make it so that that open docket, so that the public can be providing input to things in a more continuous manner, is more accessible. So I will repeat that, because I think that could directly affect these kind of processes as well.

Thank you.

MEMBER CHAPMAN: Any further comments? I would like to say while there may have been advantages to past processes, these materials all got listed somehow via some of these past processes that we are now having the difficult time of trying to work out now. So there are shortcomings and
advantages to every meeting process.

Any further discussion? Seeing none, we will move to a vote on this item. All those in favor of removing sodium phosphates from the National List raise your hand. All those opposed? All those abstaining?

VICE CHAIR FAVRE: Okay. I have a vote of two yes, 11 no, one abstention. The motion fails.

MEMBER CHAPMAN: Next on the list is sulfur dioxide. Dr. Brines?

DR. BRINES: Thank you. The substance is included at Section 205.605(b) of the National List as sulfur dioxide, for use only in wine labeled "made with organic grapes," provided that total sulfite concentration does not exceed 100 parts per million.

Thanks.

MEMBER CHAPMAN: Sulfur dioxide is used in wine labeled with "made with organic grapes." Limited public comment was received, most noting that the substance was critical for
certain wine producers. Others noted that since it was limited to the "made with organic" category it did not threaten the organic integrity. Substance meets OFPA criteria and its limited use.

Any further discussion on this item? Seeing none, we will move to a vote. All those in favor of removing sulfur dioxide from the National List raise your hand. All those opposed? Those abstaining?

VICE CHAIR FAVRE: Calvin, I didn't see you. What did you do? I had zero yes, 14 no, no abstentions. The motion fails.

MEMBER CHAPMAN: Next on the list is tocopherols. Dr. Brines?

DR. BRINES: Thank you. The substance is included at Section 205.605(b) of the National List and reads as tocopherols derived from vegetable oil when rosemary extracts are not a suitable alternative.

Thank you.

MEMBER CHAPMAN: Tracy?

VICE CHAIR FAVRE: Okay. Tocopherols
are used as antioxidants in feed, animal feed and foods, and are manufactured in liquid and powder forms. Commonly extracted from distillates of vegetable oils.

Public comment was divided on the relisting of tocopherols, with some comments staying that the material's primary use as a preservative was, therefore, inconsistent with organic production. According to one commenter, synthetic tocopherols are less bioavailable than natural versions.

Additionally, some commenters asserted that non-synthetic tocopherols are commercially available and should be used instead of synthetic. However, the majority of comments were strongly in favor of relisting, saying that tocopherols are critically essential to maintaining food safety, preventing rancidity, and providing nutrients to their products.

Some comments stated the use of rosemary oil, which is a potential alternative, imparted off flavors or fragrances to their
products that were not acceptable to consumers.

Some comments addressed the issue of ancillary substances and stated that due to the myriad formulations required for some technical and functional effects they would not be in favor of restrictions on ancillary substances used in tocopherol formulations.

And I just want to add, we did receive some feedback in regards to the question of -- given the feedback on the commercial availability of non-synthetic tocopherols, the Handling Subcommittee sought input on how reclassification of tocopherols to 205 -- from 205(b) to 205(a) would impact organic growers.

One commenter warned of the inconsistent supply of non-synthetic tocopherols and urged the Board to leave the current listing.

The vote in committee was unanimous to retain the listing on the National List.

MEMBER CHAPMAN: Any further discussion on this item? Zea?

MEMBER SONNABEND: Thank you. This is
one that we are going to take up a reclassification
and a suggestion after this meeting, after
sunset -- at least one commenter pointed out that
tocopherols could be used -- you know, there are
some applications and uses and supplies of
non-synthetic tocopherols, but there
was -- because it's not even on the list as a
non-synthetic, it's not clear that non-synthetic
can be even used.

And there are one or two other items
where this is the case, too, where we have all just
assumed all along that if it's on the synthetic list
you could use a non-synthetic form, if you could
find it. Carbon dioxide is another one like this.

So I think we may be wanting to
entertain whether we should put it on both 605(a)
and 605(b) and specify a different use on -- you
know, because my impression from the public
comments is for certain things there seems to be
enough supply, but for other uses there isn't.

And so I think that's something we need
to at least look at. I'm not saying I have decided
or that we should, but something we should at least
look at whether it's appropriate for both lists.

MEMBER CHAPMAN: Any further comments?

Tracy?

VICE CHAIR FAVRE: I actually agree
with the idea of putting it in both places, because
we could potentially be putting some producers in
a pickle if they have a technical or functional
effect that they can't get from a natural.

And so the idea of having it clearly on
both places would sort of avoid some of these issues
like we have been having today. I mean, the
vitamins are another example that we talked about
earlier. So I would support having it in both
places.

MEMBER CHAPMAN: Any further
discussion? Colehour?

MEMBER BONDERA: I mean, I hesitate,
but just to follow up with what Zea and Tracy said,
were those requests to the subcommittee to add it
to the work agenda of the subcommittee? And was
that approved, or were those just comments and that
might or might not happen? I'm sorry. The process wasn't that clear.

MEMBER CHAPMAN: Zea?

MEMBER SONNABEND: We have already brought this up to the Department and the Executive Committee, that -- and not about us double listing, but an annotation change or a classification change for our future work plans.

MEMBER CHAPMAN: It is already on the agenda. Yes. Colehour?

MEMBER BONDERA: Thank you. I hereby request that the double listing be added to the work plan as well of the subcommittee.

Thank you.

MEMBER CHAPMAN: We will consider it part of the same substance. I think it was added to the work plan as reclassification, and so that would include classifying it twice or classifying it just once.

Any further discussion? Seeing none, we will move to a vote. All those in favor of the motion to remove tocopherols from the National List
raise your hand. All those opposed? Any abstentions?

VICE CHAIR FAVRE: The vote is four yes, nine no, one abstention. The motion fails.

MEMBER CHAPMAN: Thank you. Next on the list is xanthan gum. Dr. Brines?

DR. BRINES: Thank you. This is the final material under consideration for Section 205.605(b) of the National List, and the listing is xanthan gum.

Thank you.

MEMBER CHAPMAN: Zea?

MEMBER SONNABEND: Yes. And you will have to excuse my somewhat gasping from air, but I'm having an allergic reaction from lunch, probably due to lecithin and not tocopherols.

Okay. Xanthan gum is a polysaccharide derived from microorganisms through fermentation. It is used as a thickener and stabilizer. We have received information that it is non-synthetic and that it is produced similar to gel and gum, and we have had some public commenters disclose a
manufacturing process that might lead us to think it's non-synthetic.

We have decided to send this out for a TR on the question of manufacturing before we take a vote on this for reclassification. So it is on our future work plan, after we look at the results of the TR.

Information was brought up about potential harm to premature infants, citing several linked articles after the first posting. I did look these all up, and it seemed to be one specific incident that happened in a plant that made a product containing xanthan gum, one of several plants that the company used in one product.

It seemed very inconclusive from all the reports I could find on the internet whether the problem came from xanthan gum or from other ingredients or from outside contamination of this one factory. And as we have been told since then from the public comment that came in from this meeting, this company reached an agreement with the
investigating authorities that is sealed, and so we can't find out what the reason is.

But there was no reason for me to conclude that it actually came from the xanthan gum, in general, rather than a specific contamination issue of a batch or a plant or something.

And there is also no replication of this type of concern, other than this one incident. So the only ancillary substance identified for xanthan gum is guar gum, which is already on the National List.

MEMBER CHAPMAN: Any further discussion? Jean?

CHAIR RICHARDSON: I think this is one I didn't do enough homework on. Zea, can you remind me why this is necessary.

MEMBER SONNABEND: Yes. It is used particularly in low temperatures where heating is not involved, because it keeps things in suspension at low temperatures, and that it is used in lesser quantities than the other gums, which allow the
products to comply with the 95 percent organic rule.

So, in other words, one of the reasons we are seeing more organic guar and organic locust bean gum, and things reformulated to include those instead of xanthan, is because you need quite a bit of it, and then it would bump them over the five percent. Whereas, this can be used in lower quantities.

MEMBER BONDERA: I guess it's a follow up to that. I'm not sure, because my question was regarding essentiality. And I can't tell if your comment, Zea, answers that it's essential in cases where the producer doesn't want to make a certain volume or something.

MEMBER SONNABEND: Okay. You know, essentiality is a very subjective determination. And so I will say what I said before, several times I think, if you don't mind runny salad dressing, then, no, it's not essential. But if you want your salad dressing to stay thick on the store shelves, then, yes, it is essential. If you don't like that
it's in it, make your own salad dressing.

So, but for a product that is thick and in suspension and looks like salad dressing on the store shelves, most manufacturers would consider it essential.

MEMBER CHAPMAN: Any further discussion?

MEMBER SONNABEND: And that's an oversimplification. I'm aware of that. But that is the best example I can give.

MEMBER CHAPMAN: I would like to note that this is already on our work agenda for reclassification.

Seeing no further discussion, we will move to a vote on this item. All those in favor of the motion to remove xanthan gum from the National List raise your hand. All those opposed? Sorry. Back to those -- start over, so she can get it. All those opposed to the list?

All right. I'm going to start over from scratch, just to make sure it's clear. Sorry, everyone.
The motion is to remove xanthan gum from the National List. All those in favor of removing xanthan gum raise your hand. All those opposed? Any abstentions?

VICE CHAIR FAVRE: That was five yes, eight no, one abstention. The motion fails.

MEMBER CHAPMAN: Thank you. I apologize for that. I just really want to have Jean buy us all drinks, if we get done by 4:00.

Okay. Moving on, that concludes 205.605(b), and we will start with 205.606. Harold?

MEMBER AUSTIN: Hey, Tom, before we move on, point of clarification.

MEMBER CHAPMAN: Yes.

MEMBER AUSTIN: Back on potassium acid tartrate, I believe Tracy read into the record that the motion passed, rather than failed. So I just wanted to make that clarification.

VICE CHAIR FAVRE: Okay. Thank you.

MEMBER CHAPMAN: Tracy, can you reread the vote on that one?
VICE CHAIR FAVRE: Yes. The vote was zero yes, 14 no. The motion failed.

MEMBER CHAPMAN: Okay. Let the record reflect that that is the official vote.

VICE CHAIR FAVRE: Thank you, Harold.

MEMBER CHAPMAN: Moving on, so next is 205.606. Dr. Brines?

DR. BRINES: We are moving on to 606, non-organically produced agricultural products allowed as ingredients in or on processed products labeled as organic, (a) casings from processed intestines.

Thank you.

MEMBER CHAPMAN: Jean?

CHAIR RICHARDSON: Before we start on the casings per se, I'm sorry to put you on the spot, Emily, but there may be some people in the room that don't really know the history of how these 606s got onto the list, and I would appreciate if you could help remind us in roughly what year 606s came onto the list. And if at that time when they were being put onto the list, did they consider the OFPA
criteria?

MS. BROWN ROSEN: The 606 -- well, the 606 materials were all mostly added I think -- well, the original ones were all added in 2007 after there was the determination from the Harvey lawsuit that it did not include specific agricultural ingredients and they needed to be individually listed.

As far as OFPA criteria, I can't really say -- I mean, the Board did their -- I think, you know, it was the first time it was done. I believe that's what they considered when they -- they looked mainly at commercial availability and, you know, necessity. But I believe that they considered all the criteria. I'll have to look back at that.

MEMBER SONNABEND: Clarification.

MEMBER CHAPMAN: Yes, Zea.

MEMBER SONNABEND: There were four on the -- for 606s on the list when it first came out, maybe five. They were gums, kelp, lecithin, and pectin. The others were added after
Harvey -- well, no, the shellac was added before Harvey, but I think the rest of them were added after.

MEMBER CHAPMAN: Does that answer your question, Jean?

CHAIR RICHARDSON: Yes. If I can, then, go on to casings. I'm the lead person on that. Casings are used -- they are processed intestines. Did we read that? Yes, we did.

They are processed intestines from both organic and non-organic animals, and one of the reasons why it's a challenge to remove this from the list at the present time is that at the moment when you do -- when you go to slaughterhouses, for any of you who, like myself, have done a number of slaughterhouse inspections, the intestines are not separated between organic and non-organic slaughter stock at the time of slaughter. They all go into one large vat typically, and are then subsequently processed at a later point.

And at the moment, even though we think there is an awful lot of organic animals out there,
there are really not a large number of organic animals out there relative to the non-organic animals that are being slaughtered. And so, without this separation, it means that there is in fact no availability of intestines that come from only organic animals.

And so the availability just isn't there commercially. And the use of putting the sausage meat into casings is a critically important component of being able to utilize the whole animal, as we have heard in testimony both at this meeting and in written testimony that has come in.

There is some suggestion that you could use synthetic collagen, for example. That was one of the comments that came in. And it's sort of interesting because some of the certifying agencies prohibit the use of collagen casings unless it's obviously peelable. And some entities suggest that you have collagen casings, so there is a little bit of a debate out there as to how we should deal with casings.

But all of those producers that are
generating organic meats that need to be turned into sausage or the equivalent, all find that processed intestines are in fact a necessity. Everyone would like there to be organic ones, and certainly, again, this is something that we can encourage from our records here today, sort of how to begin the process of separating when they have large numbers of organic animals coming in.

These intestines are washed in pure water with no chemicals and salted in straight salt and water, no other ingredients. No other processing aids are used. And so while it is true, yes, these are from a mix of organic and non-organic animals, I believe that the most reasonable thing is to leave casings on the National List.

And the vote reflects that in our subcommittee vote we had six persons voted to keep them on the list, one person abstained.

MEMBER CHAPMAN: Any further discussion on this item? Miles?

MR. McEVOY: I think we have something.

Lisa?
DR. BRINES: Just a quick I guess question for Jean. You had mentioned the alternative synthetic collagen and divergent opinions among certifiers on these for that substance. I wasn't clear if that was what you had meant.

CHAIR RICHARDSON: Yes. One certifier said that they prohibited collagen casings. Another one said that they would suggest that we had an annotation to include collagen casings.

DR. BRINES: Okay. I think we'll look into those comments. We want to make sure to ensure consistency among certifiers evaluating materials for the National List.

Thank you.

MR. McEVOY: A little slow this afternoon after lunch. But the question about what happened in 2007 with the 606 materials. Prior to the addition of the many materials to 606, the 606 list was an open-ended list, sort of like the commercial availability for seeds, where there
is hundreds of varieties of seeds that can be used in non-organic form, if organic seeds are not available. That was the case before 2007 in the Harvey lawsuit.

So there were a few materials on 606, but the practice by certifiers prior to 2007 was that any agricultural ingredient could be determined to be not available in organic form and used in the process for organic food before 2007.

So when the list was expanded in 2007, it actually was an incredible restriction in terms of the numbers of materials that could be used in non-organic form, because there are hundreds, if not thousands, of agricultural ingredients that are not on 606, and by the action taken in 2007 were no longer able to be used in processed organic foods.

MEMBER CHAPMAN: Thank you. Any further discussion on this item? I had a question for Nick as a meat processor. I believe you mentioned in public comment that you have sausages. I was curious to know if your attempts to find
organic casings and what is your opinion of the
market, or how the market could be encouraged.

MEMBER MARAVELL: Right. I have, you
know, have been in touch with a few processors. I
am not in touch with any organic processors,
because there is not an organic beef processor in
my state. The ones I have been in touch with out
of state do not have access to an organic product
for casings.

And what Jean says has been my
experience because I go and I visit the slaughter
floor to make sure everything is just lumped
together.

Now, in my case, we use a small
processor, and they usually on any given day, all
they'll do is process our beef. So, in that case,
they would be getting organic intestines. But
they save them up, and the truck just comes once
a week, and so the next day they are processing
somebody else's and they all go into the bucket.
And then it just goes all into the truck, and then
whatever they do with it from the truck.
So I would love -- well, the truth of the matter is, I can only speak from my experience in my state, and maybe a few of the surrounding states. There is just not enough organic beef, and, you know, I could sell much, much more organic beef. The demand is there, but the production is not there. So that's anecdotal.

MEMBER CHAPMAN: Thank you. Any further discussion on this item? Jean?

CHAIR RICHARDSON: Just a clarification. There is no source that I could find in any of my research of any organic casings anywhere in the world.

MEMBER CHAPMAN: Thank you. Any further discussion? Seeing none, we will move to a vote on this item. All those in favor of removing casings from the National List raise your hand.

All those opposed? Abstentions?

VICE CHAIR FAVRE: That was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is celery powder. Dr. Brines?
DR. BRINES: Thank you. The substance is included at Section 205.606 of the National List as, b) celery powder.

Thanks.

MEMBER CHAPMAN: Thank you. Celery powder is used in a variety of processed meats, such as hotdogs, bacon, ham, corned beef, pastrami, pepperoni, and salami, to provide cured meat attributes without using prohibited nitrate products. I use the parentheses around "cured" because products must still be labeled "uncured" due to other regulations.

Celery powder is manufactured from celery which is cleaned, macerated, physically separated, and the liquid is concentrated by evaporation, heated, and vacuum dried, but no other chemicals or preserving agents are used in the manufacturing process. And celery powder is typically standardized to a specific nitrate content.

Current attempts to find a suitable organic version have not yet been successful from
the industry, and no comments were received from industry or manufacturers of celery powder that they carried this product in an organic form.

Several ranchers, meat processing companies, trade associations, certifiers, and an ingredient processor wrote in in support of continued listing. Comments were received from interest groups in opposition stating that the product was a vehicle for synthetic nitrates and that nitrates pose human health concerns, but did not present any new evidence about celery powder or nitrate content therein.

One retailer noted organic celery powder was commercially available but did not provide any sources. Other comments were received, neutral in nature, but raising similar concerns, including one mentioning a Guardian article published on October 26th that speaks to an IARC finding that links consumption of processed meats to cancer.

However, the IARC report is general to processed meats and does not distinguish between
type, pure, organic versus non-organic, or other attributes, and does not mention celery powder.

There has been one point of unity in this throughout the community, and that is the calling to find an organic alternative to conventional celery powder and that this is a priority. While the Handling Committee did not add this as a research priority in time for this meeting agenda, we have heard the community loud and clear, and we will be asking, or at least I will be asking, the Administrator to add this to the list, given the unanimous request from the organic community.

The Handling Subcommittee recommends celery powder remain on the National List, given the unavailability of functional organic version or alternatives, low usage level, and its necessity in the manufacturing of traditionally cured meat products. This material satisfies the OFPA evaluation criteria.

And we will open this up for discussion.

Colehour, then Zea. Zea first.
MEMBER SONNABEND: Okay. I couldn't quite understand one of the last comments you made, but was it that the Handling Committee should discuss putting it in our research priorities for the future, to research celery powder?

MEMBER CHAPMAN: Yes. And I made that --

MEMBER SONNABEND: Okay.

MEMBER CHAPMAN: -- as a personal request to the Administrator.

MEMBER SONNABEND: I very much support that, and particularly perhaps growing organic celery with a lot of sodium nitrate, since that is still allowed, might get them there.

MEMBER CHAPMAN: Maybe in a hydroponic situation.

(Laughter.)

Colehour?

MEMBER BONDERA: Thank you. Yeah. I guess part of my comment or question was going to be to ask you to either repeat or expand upon what the goals of the research would be for, in terms
of, frankly, if the research identified ways to produce organic celery that did meet the necessary criteria, then what?

What happens with that research or what are the results? Or, therefore, we're going to hope that people are going to start doing it, and the demand will be there to not use something that is already on the list, or that it would be delisted five years from now because of availability? Or I just want to hear that -- the next step of the thinking that you were referring to.

MEMBER CHAPMAN: The goal would be to find an organic alternative to the conventional one currently in usage. The demand is clearly there, since there is such a high usage of celery powder in organic and cured meats. And so it would be to replace that conventional product.

MEMBER BONDERA: Yes. I mean, it makes sense, I guess as a follow up -- and we don't need to revisit it -- I wonder, especially -- not specifically, but, you know, Nick's anecdotal evidence regarding the casing discussion. And
like Jean said, the organic meat is happening, and the casings are there, but they are getting combined with non-organic and not getting separated.

I'm not sure it's true in the celery powder case, but I'm just wondering if we are going to switch out of what is happening. You know, some of those things that need to happen are -- I guess I'm bringing up that example, because that one already exists to some degree, like Nick described, but the industry isn't implementing that separation of the organic casings versus the non-organic casings, even though it already does exist. You can't argue that it doesn't exist, because, you know, the organic meat is processed.

And so I'm just trying to mesh together, okay, will it really happen, even though it's happening, is the reason I'm bringing it up in the celery powder example. And so I'm just wondering this through out loud. Thank you.

MEMBER CHAPMAN: Yes. I'm going to respond to that, and then I'll go to Zea. In the
case of Nick's operation of casings, actually, I don't think organic casings exist, organic intestines exist. They are not being captured or made into organic casings. And from reading your website, I don't think your processor is certified as organic either, so as they get --

MEMBER MARAVELL: No, he's not. My processor is not certified. As I said, we don't have --

MEMBER CHAPMAN: Yes. So as they get slaughtered, they lose that status probably, or as they get processed they lose that status.

MEMBER MARAVELL: Absolutely.

MEMBER CHAPMAN: So that's one thing.

On the other end, so your issue there is the intestines exist and they are not get turned into casings. Here, the celery in the form that we need it does not exist, and that's what the research would be to find.

Zea, then Tracy, then Ashley.

MEMBER SONNABEND: I mean, the research also -- I was somewhat joking about the
celery -- was sodium nitrate, because there may be other alternative crops that are high in nitrate, or alternatives to nitrate high things that could cure.

And, in that vein, I did notice that yesterday, Nick, when you responded to one of the public comments said that you cured meat without celery powder. And so I'm curious to hear how you cure the meat and how well it keeps and things like that.

MEMBER MARAVELL: No. We make sausage without celery powder. It is uncured. So, and let me just say, my customers will not touch anything that has got a preservative of any sort. They don't care whether it's organic or not organic. So I have a finicky group.

So basically just think about our sausage as ground meat with spices in it. But we do add salt and vinegar, which does have some preservative value that my customers, you know, do not object to.

And we advise our customers -- we
deliver it as a frozen product, and we advise our customers not to keep it defrosted for more than two weeks. And we advise them that the easiest thing to do, because we sell it in links, some -- some do like it unstuffed, if you will -- bulk, but, you know, just cut off one or two links at a time and leave the rest frozen. But that's how we deal with it.

So there is an alternative, if you want to deal with a frozen product. But the product is different, if you don't cure it. And we are only doing beef.

Now, we have mixed beef with pork, and that seemed to work out all right for our customers. But once we had liverwurst made up, which we have never been able to get made up again because our processor, even though I requested an uncured product, cured it anyway. And we could not really, in good conscience, move it anymore. We did have some people who were interested in buying it, but -- so you don't cure.

MEMBER SONNABEND: And you don't make
bacon or ham.

MEMBER MARAVELL: No. Although there is something called beef bacon, but that's totally different. No, and we might get into ham and into pork. And if we do, I'm not really sure how to handle it, and that's one of the issues I would have to discover.

MEMBER SONNABEND: Thank you.

MEMBER CHAPMAN: Ashley? Or, sorry, Tracy?

VICE CHAIR FAVRE: We had a public commenter yesterday talk about some of the research that they have done trying to find ways to consistently make a repeatable amount of nitrates in celery. And I got a pretty strong impression that this is an issue that they are trying to resolve.

I think she stated pretty clearly that they are not there yet, but they are trying to make some progress and need some time.

So I don't agree with your basic premise, Colehour, on this, about it's available
and it's just not being used.

    I agree with Tom's comment, this is a
totally different deal, and I do think that putting
it on as a research priority is probably going to
send a good message, I hope, that this is an issue.
Clearly, the public comment and the debate about
it will indicate that as well.

    And I'm in support of relisting or
continued listing of celery powder, but putting
people on notice that we are going to need to look
at some alternatives and to get moving on that.

    MEMBER CHAPMAN: Ashley?

    MEMBER SWAFFAR: Yes. I was reading
in the comments, and there were several comments
in there that said some of the research that they
had started on their own. And as an industry
group, I think that they are getting our message,
you know, because a lot of us are a little uneasy
about keeping this on the list.

    And I think, you know, these industry
groups that they are putting together to do their
own research is really important. I have had a
little experience with a substance like that before.

MEMBER CHAPMAN: I'm going to make a comment and then go back to Zea. We keep speaking of solutions, too, as potentially -- or it keeps coming up in public comment that the solution might be just additional nitrate content on the plants. And I think that is just a short-sighted view of the range of possible solutions. It could also be better genetic stock and breded stock that has been bred -- specifically, celery that has been bred specifically for this content. And I think it speaks, to a degree, to the lack of organic seed options available to our farmers. That's an area that could use additional research, I know. It's close to my company's mission.

Zea?

MEMBER SONNABEND: I also just wanted to point out that a fairly decent number of public comments we got from farmers who feel that this is critically important, and able for them to utilize their whole animal and process parts of it that
ordinarily would have to go to waste, if there wasn't the opportunity to cure them and sell the cured meat product.

And this is something that I find compelling, to keep it on the list while we try and do the research to find an alternative to this.

MEMBER CHAPMAN: Yes. There were eight ranchers that specifically commented.

I'll go with Nick, then Francis.

MEMBER MARAVELL: I can see that with pork, but my experience with beef is that we have been able to do it without it. So I'm just going to add that anecdote.

MEMBER CHAPMAN: Can I ask Nick a question on that before? So you've been able to do corned beef, bacon, pepperoni, salami, pastrami, ham?

MEMBER MARAVELL: No. We've been able to do jerky and sausage. And if we wanted to do beef bacon, we could do beef bacon. But we are dealing in a frozen product, and the taste and the texture -- well, not so much the texture, the taste
and the visual is going to be pretty much acceptable.

I am not an expert with pork, and I think this is a problem with pork. I don't have a solution there.

MEMBER CHAPMAN: Thank you. Francis?

MEMBER THICKE: My specialty when I went to graduate school was in salt fertility, and nitrogen in particular. And, to me, I don't understand why we could not make a comparable product in organic. Celery is celery. Nitrogen is nitrogen. You basically have two nitrogen trials. I don't understand why they couldn't duplicate that in organic.

Now, we might argue whether or not that's ecologically a good idea, but I can't understand why we couldn't duplicate that in an organic production system.

MEMBER CHAPMAN: Thank you. Any further discussion on this item? Seeing none, we will move to a vote. The motion is to remove celery powder from the National List. All those in favor
of removing celery powder raise your hand. All
those opposed? Abstention?

VICE CHAIR FAVRE: The vote was five
yes, nine no. The motion fails.

MEMBER CHAPMAN: Next on the list is
chia. Dr. Brines?

DR. BRINES: Thank you. This
substance is included at Section 205.606 of the
National List under, c) chia, Salvia hispanica L.

Thank you.

MEMBER CHAPMAN: Chia seeds: It's
widely agreed that they are available in organic
and should be removed from the National List at this
time. There was a unanimous recommendation from
the Handling Subcommittee to remove this item.

Is there any further discussion?

Seeing none, we will move to a vote. All those in
favor of removing chia seeds from the National List
raise your hand. All those opposed? Abstentions? And the Chair notes that Francis is
absent.

VICE CHAIR FAVRE: The vote was 13 yes,
zero no, zero abstentions, one absent. The motion passes.

MEMBER CHAPMAN: Next item on the National List are colors. We are going to read colors as one grouping. Dr. Brines?

DR. BRINES: Yes. Thank you. And unless there are objections, I will forego the pigment cast number, just for clarity, although they are in the written proposals for the record.

So the listing is under Section 205.606(d), colors derived from agricultural products must not be produced using synthetic solvents in carrier systems or any artificial preservative.

The listings are: 1) beet juice extract color; 3) blackcurrant juice color; 4) black/purple carrot juice color; 5) blueberry juice color; 6) carrot juice color; 7) cherry juice color; 8) chokeberry aronia juice color; 9) elderberry juice color; 10) grape juice color; 11) grape skin extract color; 12) paprika color, dried and oil extracted; 13) pumpkin juice color; 14)
purple potato juice; 15) red cabbage extract color; 16) red radish extract color; 17) saffron extra color; and, finally, 18) turmeric extract color.

Thank you.

MEMBER CHAPMAN: Thank you. These were listed in the agenda and the public request for documents as part of two motions, one in favor of a grouping and one in favor of delisting the grouping.

At this time, it is the Chair's recommendation that we vote on each one individually, and that's why they were read as a whole, as there may be changes based on public comment as it came in. But that will be a decision for the Board.

And now I hand it over to Jean to give the introduction.

CHAIR RICHARDSON: I think this is one of Mac's originally, and then he couldn't have time to do it, so I got it.

And, I'll tell you, all right, colors, there's lots of them. As you saw, we've got 17 to
look at and -- but the first go-round, when we did our first meeting on this and got the first set of public comment, it began to look as though the availability of the colors in an organic form was consistently good for a large group.

And so initially what we ended up doing, based on the input we got at the first meeting, was to suggest that we could have 13 of them in one group, and with a strong recommendation to remove and have four that -- where it looked like there really was not organic availability at the present time.

However, with the second set of public comment, it became quickly apparent that it's all over the place, and it's much -- it's not as simple as that.

And so if you would be patient with me, if you haven't been looking at colors day and night and keeping you awake, then let me go through and give you a sense of the public comment out there, so that -- because it would be my recommendation -- I agree with Tom -- that we need
to look at each one and vote on each one separately, because there are separate little nuances with each of them in terms of the reality of the availability in a form that is not just quantity but is also quality in the colors that are available in the industry at the present time.

I will comment in the context, however, that there is absolutely no question that industry is very clearly aware of the fact that all of these colors will probably be able to go away from this list within the next five years, because there really is a huge effort to seek organic materials.

So we have one of the -- and I'm just -- I mean, I'm not going to cover every single public comment, because we had a lot, but I am going to make sure you've got a good cross-section. So we have one certifier, a large certifier, that says that because of the variability, seasonal availability of both quantity and quality of these colors that they would recommend that all of the colors that are listed there, the 17 of them, should remain on the list.
There are, similarly, some of the producers that have said the same thing, that sometimes they can get materials and other times they may not be available in the quantity or quality that they need.

Some of the colors are complicated to get the right kind of color, and one of the ones that keeps coming up over and over again that you will see is sort of pulling out to say do -- can we leave this one on the list would be black/purple carrot.

So black/purple carrot becomes one of the ones that quickly shows up as having a wide range of consistent lack of reliability in the marketplace. You'd think there would be lots of organic carrots, but apparently the black/purples and the carrots are some of the harder ones to get hold of.

One of the major companies ran through a whole list of the colors that they thought they really needed, and that included beet and blackcurrant, and yet another company stated
that -- I'll pull it out -- stated that the -- so many pieces of paper. What did I do with it? Stated that the beet and the blackcurrant are widely available, and that they bring them in from Europe in particular where -- ah, yes, I found it -- that the organic red beets are contract farmed across Europe.

And they are sourced from Netherlands and Germany, and, similarly, let's see, the red beets and also the blackcurrants are available and the -- and because the European Council Regulations do not include blackcurrant and beet, it indicates that these are not exempt from being organic, and, therefore, there is plenty of them available. However, other of our United States companies state that that is not the case in their experience.

And it comes to blueberry. This one major company I'm looking at now says that blueberry is not readily available. They also found that both carrot and cherry are not available in either the quantity or quality that they want.

It does appear that chokeberry,
elderberry, grape, in its two forms, is mostly always available. But when it comes to pumpkin and red cabbage, those two seem to be consistently not readily available in organic form.

So so far we've got, therefore, like there's four of them that I began to identify -- the black/purple carrot, the carrot, the pumpkin, and the red cabbage. And I don't know about the cherry, but they don't seem as consistently available in this set of public comments.

Purple potato and red radish, while one company says they are available, another company says they have no trouble getting as much as they want.

A major trade organization suggests that turmeric still is a problem, not because it's not available organically, it is available organically, but the turmeric sometimes creates an off flavor in the food.

So if you like turmeric flavor along with your color, then that's great. I actually like turmeric, so I would be okay, but some of you
others might not be. However, it is available organically, so that is something that I assume could be worked on.

This major trade association also listed red cabbage as being problematic, and they listed beet juice despite, as I say, that other company that says it's available.

The International Association of Color Manufacturers, IACM, I mention them because they are actually making these colors -- don't usually mention the groups by name -- they recommend that all of the colors are not really commercially available as organic, and they would recommend that they all stay on the list.

Some of the dairy companies say we need to keep all of them, because there is a seasonal variability in their availability. The Association of Dressings and Sauces say they need blackcurrant, and that is not readily available.

I'm sure Tom probably put this onto a matrix, and he is going to tell us the answer to all our questions in just a minute.
Other major certifiers, said that the trouble is that none of the organic colors are currently available in powder form, which is required for some of the food applications. Some will be available in liquid form but not powder. Additionally, some are using shades of the color, such as fruit punch or mango yellow, which are combinations of colors, some of which are available organically and some are not. So you can see the plot thickens without any xanthan gum maybe.

All right. So, again, another company saying that organic black/purple carrots and carrot juice are not available readily. More to go. Don't worry. In fact, there is quite a bit of consistency in the black/purple carrot, the carrot, pumpkin, and the turmeric.

Red cabbage is a problem, because the red colors do not provide a long-lasting color. They begin to fade in the product over time. So it sort of goes like a brownish color rather than red, and consumers, as we know, are a fickle bunch.
They want things pure, but they want them colorful.

That was my addition. That was not in the report. Sorry. Very bad, Jean.

One of the consumer groups says we should just remove all of these, because the colors should be available, and conventional production is full of chemicals. Another consumer group, similarly, states remove all of these, because the production under conventional agriculture does not meet the OFPA criteria.

Further, that it would be a strong incentive to the organic industry and farmers. If we were encouraging farmers to produce more products for color as opposed to just the food, you would, therefore, have plenty available, and that this would provide an incentive to the organic industry to work with them.

Another company -- yes, another -- all of the public interest groups believe that they should be removed as they are all grown using chemical-intensive agriculture inputs.

Let's see. It's the reliability of the
color is stressed, and the hue of the color, that is also raised by many of the companies.

Let's see. The issue of 205.600(b)(4) is also raised by one of the public interest groups to say that 600(b)(4) prohibits the use of synthetic processing aids or adjuvants whose primary use is as a preservative or to recreate or improve flavors, colors, textures, or nutritive value.

All right. So executive summary here. On the one hand, processes need a consistent supply of color. And if we remove all of them, they feel that we will negatively impact the production of their commodity that they are producing and there would be a lack of availability of these organic processed foods that have the color in, because the market demand would decline.

On the other hand, if we keep this exception there, and if we -- let's see, how did I have that. No. How do I put this. If we remove them from the list, we will provide an incentive to organic farmers who might want to get into the
organic colors business, but at the moment they can't compete with cheaper conventional production.

So win some, lose some. It is definitely not a simple decision for us to make here, so whichever way you vote you are going to upset some of your friends out there. I believe that's -- I mean, it's obvious there's plenty of comment, so I think maybe I will let -- turn it over to you to get some more from the rest of the Board before we go on.

MEMBER CHAPMAN: Thank you, Jean. Clearly, you spent a lot of time on this item and did thorough research. So much, much appreciated.

I believe Mac had a point.

MEMBER STONE: First, I'm really glad I begged off of this one and I owe you two bottles of wine, not one.

MEMBER CHAPMAN: It's a bottle of wine per color.

MEMBER STONE: I can't get wine in all these colors.
I was taking notes. The thought was we'll vote on these individually and my head started spinning and my pen stopped working. I'm not sure just which. I'm just really concerned that we have good information to start cherry-picking and deciding which ones can or cannot get.

One of the initial comments you made was it seems the trend is that in another five years all of these will be able to be in organic. And I'm just going to suggest that we give them a little more time and not think that we have good information to start picking and choosing which ones to remove from the list.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: Okay. As a layperson to food formulations, this is one of the most difficult for me to evaluate commercial availability issues on. And I don't really feel like we got specific enough good public comment on this because people just said we need the color or we don't need the color.
What I would have wanted people to say -- and I'm holding up these three candies here -- is to go down our list and give us a color that equates, put a little color sample in. Choke cherry makes this color and purple carrot makes this color and Aronia makes this color. Then we will know that it's really a different color for all these so-called colors and then to then say, "Little Johnny has to have this color because he won't pick this color if it's not this color."

I mean, seriously, they all looked like red or yellow or something. And if we just keep one red, one purple, one yellow, isn't that commercially available? We didn't get specific information about why you have to have an exact shade of something and they couldn't use a different shade that was organic.

I feel comfortable with Jean's analysis in the subcommittee of the ones that really aren't available and not removing that group we decided not to remove. But on the others, I feel like I have to abstain.
MEMBER CHAPMAN: Other discussion?

Harold.

MEMBER AUSTIN: This is a complicated issue. There is no doubt about it. I think if you look at the public comments that we got back it's changed even for me the materials I would choose to have left on the list and the ones that I would like to remove. So it's definitely confusing.

I'm also tending to lean with Mac that we should give the stakeholders a little bit more time and make sure that what we do we do with a lot of knowledge. And I know on the subcommittee we went back and forth on these issues.

But public comment, Jean, I think you nailed it when you said it was all over the place because it was. And it was really hard to get a good read on what's really available and what's not.

Right now, I'd almost be a proponent of listing them all again. There's a couple I think I would lean towards removing. But do we really have enough knowledge to do that in a clear process
moving forward. I'm not so sure we do.

MEMBER CHAPMAN: I'll say something and then Jean and Tracy. I share the concerns that have been said here. I don't feel like there's enough information and I'm a bit torn on this issue myself.

On one end, I feel like these can and should be produced organically. Whether they are today, it doesn't seem to be clear at least in the availability or the form needed by manufacturers.

And I have a concern that we often think that this is a manufacturer's decision when in reality they're trying to produce a product that's 95 percent plus organic that competes in a marketplace that has threats from natural and non-GMO. And when you have a non-GMO candy next to an organic candy that's half the price of the non-GMO price, which is the consumer going to choose? They're both candies. It's not like it's a health decision.

But do you want the organic side to that product, the 95 percent of this fruit to be organic
or do you want it to be non-GMO? Right. And if it's a non-GMO sugar cane, what does that mean when non-GMO sugar cane is not out in the marketplace? That's what I'm struggling with.

Jean.

CHAIR RICHARDSON: I did spend a heck of a long time going through all of these. And while it's not simple, I think that it is really important for us to send an encouraging message back to both processes, farmers, consumers and those companies that are trying to produce these organic colors that we want to support organic color product. We want to support the farmers that are growing the vegetables to produce the organic material to give to the organic color processing companies so that they can meet the demands for the colors.

If we don't eliminate a whole bunch of these off this list, I think we're not sending the correct message. We're not encouraging the farmers. We're not encouraging the organic color companies. And we are also not noting the concern
from all of the consumer groups that say, "Hey, these are all being produced with conventional methods. And do they really meet ARFA (phonetic)?"

So when I have gone through it over and over again I think it's slightly different from the last bunch we went through when we worked on it in the previous set of public comments. I've identified that we probably still don't have enough beet juice, black-purple carrot juice, cherry juice, pumpkin, red cabbage and I guess if they don't like the taste of turmeric we could leave turmeric on the list. But otherwise I think we could in all honestly based on my research remove from the list the rest of them.

MEMBER CHAPMAN: Tracy, then Nick.

VICE CHAIR FAVRE: I am very torn. I sort of feel like this discussion is actually making it worse for me rather than better. As we've been sitting here talking, I was thinking about an organic inspection I did where there was a couple who was doing a salad dressing and they
had both natural and organic. What they found is when they started sourcing some of their organic products it was like apples to apples apparently on the product description. The formulations were slightly different. When they got them in, they actually had to reformulate some of their recipes as a result because functionally they worked different.

That concerns me a little bit. If we're making an assumption that you can substitute an organic cherry juice or organic cherry color for a convenient cherry we can't necessarily make that assumption. I mean certainly we can do it and maybe that would be the right thing. But that doesn't necessarily mean that there will not be an impact on the formulator.

I'm really torn what to do here. I also believe pretty strongly that we need to move towards there. And I really, really would like us to have formulations that are made with organic colors. Candidly, I'm still not exactly sure what I'm going to do.
MEMBER MARAVELL: I would like to make the comment that when you're dealing with natural products, agricultural products, you change the supplier whether they're conventional or organic. You can run into that issue because climate, exact variety, breeding stock, etc.

But the further point I wanted to make is that we seem to making things hard for ourselves. We're boxing ourselves in all the time. And I would again -- and you're going to hear this probably coming out from me a few more times -- say this would be an ideal situation where if we could establish a reasonable transition period with a deadline or whatever and put the industry on notice in a cooperative way that this is where we want to go and we don't want to create hardship for anybody. But we're serious about wanting to go there.

Somehow we get it caught into these all or nothing things. And that's not where we want to be. And that's not where the industry wants to be. I'm suggesting that we reconsider establishing phase out periods or deadlines or
whatever you want to call them. I can see that I haven't gotten very far with that suggestion.

MEMBER CHAPMAN: Next I had Lisa and then Zea and then Colehour.

MEMBER DE LIMA: Jean, I have a question for you. When you were reading public comment, I thought I heard you say elderberry, chokeberry and one other that you thought could be removed. Did I get that backwards?

CHAIR RICHARDSON: Thanks.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: My question was to ask Jean to repeat that list beyond the four that we already agreed on which essentially the traditional ones. I only caught black-purple carrot, cherry and turmeric. Right.

CHAIR RICHARDSON: So the four that we already had were the beet juice, the black currant, the pumpkin and the red cabbage. So I'm suggesting that we add to that group to leave on turmeric and cherry.

MEMBER SONNABEND: And I thought you
said black-purple carrot.

CHAIR RICHARDSON: And the black-purple carrot, yes. Correct.

MEMBER CHAPMAN: Miles.

MR. MCEVOY: I would just like to remind the Board of the criteria you should be using for making this determination. So I would ask Lisa Brines to remind you what the criteria is for things on 206. Thanks.

DR. BRINES: Right. I think this just would be helpful in terms of for any materials that are recommended for removal the basis by which NLT will consider the recommendation because we have to ensure that those recommendations meet the criteria. So in general in order for substances to be added to 205.606 of the National List, the Board had made a determination at the time it was recommended that the nonorganic form of the substance is necessary for the use in organic handling and has also looked at current and historical industry information about how or why the substance cannot be obtained organically in the
appropriate form, quality or quantity to fulfill an essential function and is assumed for organic handling.

So in terms of the Sunset review it would be helpful in terms of rulemaking to make a change that the basis for any recommendation also be reflective of those criteria. Thank you.

MEMBER CHAPMAN: Thank you. Any further discussion on this item? Colehour.

MEMBER BONDERA: Sorry, I didn't get -- Yes, I just really heard what Nick said and I actually agree. But what I was thinking and I was thinking again after he said it was I just see this as a really good opportunity frankly for a range of NOSB perspectives to -- I was already writing down the words collaboration and compromise in terms of coming to a conclusion that like Tracy said is not an easy set of variables and choices.

And I hear what Lisa is saying. But I think I just see that we should work from where we're at. And if we're able to determine with
enough verification that a product, a material, is available and we feel comfortable about it, then I think that we should use this opportunity to delist those items.

So I really encourage us all to try to work together and come to a conclusion that isn't one extreme or other, but rather is somewhere in the middle. That's my comment.

MEMBER CHAPMAN: Mac.

MEMBER STONE: Just based on what Lisa just reminded us, there already is a hardship based on the nature of 206. These food processors would much rather find it in organic form. It's much easier than justifying using the nonorganic form. And there's already incentive. It's been mentioned the trend is going this way. I just hope that we don't make any harder than it is already because they're actually trending that way already.

MEMBER CHAPMAN: I had a statement and then we'll go to Tracy. Talking about this and taking Nick's comments, I'm generally not a fan of
the expiration date because I felt like it hasn't been effective in the past where it's been used. Although I kind of feel like it would be more effective here. Although I also see Miles staring at me saying no, the program has stated that that's not an option for us.

Keeping that all in mind, I was trying to think of what is another method that might be effective or has evidence of efficacy that's been similar. And one that just came to mind is flavors. It's always nice for one NOSB to put a mandate on the next NOSB.

What happened with flavors from the last NOSB they reviewed flavors and made a statement that the next NOSB who reviewed this category should not renew it in its full form. And that's hopefully what happens when we review the annotation change on Thursday and we add commercial availability to the category of flavors.

I wonder if there's an opportunity to take a similar action here where colors get renewed, but a statement gets added that this NOSB
recommends that the next NOSB do not renew all colors in the same form. And in the next five years, the industry must find a way to solve this issue. Tracy and then others.

VICE CHAIR FAVRE: First, just to comment on that. It does sort of feel like kicking the can down the road to the next person. I appreciate that. Believe me. I would sort of like to have that solution.

Again, what Lisa said about industry's feedback, it's a little bit confounding because in some cases we've had one group say these are absolutely available and the other one say it's absolutely not. So the question I want to pose is really to Jean. Did you have one, two, three, four or whatever number of colors that somebody in your opinion or enough somebodies said it is available organically even if you had some opposition? So we would have a preponderance of evidence saying that there are some definitely available in organic form. And those are the ones you've read.
CHAIR RICHARDSON: Yes.

VICE CHAIR FAVRE: So that was black and purple, cherry. Those are not available, okay. So which ones were available again? Give me those again.

CHAIR RICHARDSON: The rest of the list.

VICE CHAIR FAVRE: So we've got four that are not available and the rest.

CHAIR RICHARDSON: No. The ones that appear to be inconsistently available are either in quantity or in quality, the right kind of color hue, are beet juice, black current juice, black-purple carrot juice, cherry juice, pumpkin, red cabbage and turmeric.

VICE CHAIR FAVRE: And you feel that there is a preponderance of evidence suggesting that the rest are consistently and with consistent quality available in organic form.

CHAIR RICHARDSON: Yes, based on a wide scattering of large enough processor groups saying that. If they were to get their act together so
to speak, yes, all the other ones would be available.

MEMBER MARAVELL: Zea, what happened on carrageenan? We did make a statement. No, no. Keep a straight face here. We did make a statement and there was responsiveness from the industry to start reformulating. And what we did was we approved carrageenan with an annotation which did not get implemented.

But we did make a statement, did we not, that we didn't feel that this was going to be approved again in another five years? And I don't know whether we just made that statement in a formal resolution or not.

And then I know with regard to the methionine we've made a formal statement. I'm picking up on Tom's suggestion here that we made a formal statement that we want to see the industry find natural sources of methionine. That was a resolution that we actually passed.

Do you recall what happened?

MEMBER SONNABEND: It was carrageenan.
It was an informal statement, not a Board resolution. And it is going to end up coming back in four years instead of five years. We've already commissioned the TR for it because the new Sunset process makes us have to reconsider things earlier. So it will be a four year review essentially.

MEMBER MARAVELL: And I know some of us made informal statements to industry not part of the meeting. And I think there was a real desire to cooperate.

MEMBER SONNABEND: Yes, almost every item though when we review it and wish we could move away from it, we made some sort of informal statement that we would like to move away from. And in fact we're going to be taking a number of things off the list, especially in 606 from five years ago.

So our intention to move away from things is working. The industry is looking for organic sources and finding them in many cases.

MEMBER CHAPMAN: I have a question for Jean. You said all the colors were available that
you just read. Does that include powdered forms of those?

CHAIR RICHARDSON: I don't have an answer to that question.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: It might be worth just reminding us that since this is on 606 it's subject to commercial availability.

MEMBER CHAPMAN: That's correct. All items on 606 are subject to commercial availability. Francis.

MEMBER THICKE: I would suggest to move forward and look at that first group of 18. And it looks like you've maybe identified 14 that we vote in groups to start with. Do we want to vote on those first 14? We can debate how many we want to vote on. Is there a consensus on some of them?

CHAIR RICHARDSON: We can do it one by one. I think we should do it one by one.

MEMBER THICKE: Okay.

CHAIR RICHARDSON: Take each color one by one.
MEMBER CHAPMAN: Any further discussion?

Can I say that would it be a true statement that the Board is fairly aligned with us adding a statement no matter what the outcome is to some of these colors that the future NOSB does not or takes a strong view at the efforts of the industry to formulate these products out and find organic alternatives? Any objections to that?

That would not be in the motions. I don't believe it's a substantial change. Is that correct?

MR. MCEVOY: Yes.

MEMBER CHAPMAN: Okay. Unless there's further discussion on this item, then it's my recommendation that we -- Mac.

MEMBER STONE: I hear the conversation about sending a message, but also feel like that -- Jean, I appreciate all the work and I don't want to discredit the work. I just think it puts a lot of pressure on you to help us get it right. I think the industry has already sent a message that
we're already doing pretty good.

We're going to potentially take a lot of these off today. I just want to make sure that they know we appreciate that they're going in this direction already, not just that they need to do better.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: Just sort of thinking through the 606, the commercial availability proposition here. So it seems to me that we might not trust the commercial availability function in that we say we've got to take it off because even if it's available organically they won't use it.

That tells me we don't really kind of trust the inspection process or the certifiers to ensure that there is commercial availability verification on an inspection. Actually, that's sort of beyond the scope of what we're talking about here.

So if these materials are available organically, then they have to use them in organic
form. So they don't have the option of using them through conventional methods. And their certifier and their inspectors should be responsible for ensuring that the commercial availability is a true test instead of just a token gesture. That's helped clarify things for me a little bit.

MEMBER CHAPMAN: Francis.

MEMBER THICKE: If that works as well as organic seeds, it probably doesn't work real well because people can just get three sources that say they don't have them and then move on and use conventional.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: But that speaks to the process of commercial availability checks rather than whether or not it should be on a list that allows for commercial availability if you follow my drift.

MEMBER CHAPMAN: Nick.

MEMBER MARAVELL: Again we're dealing with a natural product here. I'll just move over
to seed for just a second because I'm not a person who buys colors. But there are years when I can get organic seed that I want and other years when I can't because of crop failure. And the same could happen and it's sometimes very regional specific.

A lot of the seed will come out of Oregon or South Dakota or whatever and they had a crop failure. I'm not going to be able to get that seed in organic form.

There's always a twist in every one of these. And let me just ask the program for a second. Suppose we were to require organically sourced colors and there was a crop failure. Does the program have a way to accommodate industry in those situations? Would they have to do without colors or would they be able to source from -- If we took this action, if we took these colors off 606, but there was a crop failure, is there any way for the program to accommodate industry on it?

MR. MCEVOY: There are the temporary variance provisions in the regulations. But I
don't believe they apply to substances. So I don't think that would be an available variance for organic colors completely not being available.

MEMBER MARAVELL: So the variances just apply to practices.

MR. MCEVOY: Right.

MEMBER CHAPMAN: Any further discussion?

Seeing none, unless there's an objection, what we'll do is move down the list of colors as it is listed in the National List alphabetically and vote on them one by one.

Sorry. Zea, did you have -- You do not, okay. She's gone. She said she's going to abstain. Seeing no objection to that, I'm going to ask Dr. Brines to help me out with that list. Can you tell me again alphabetically? And I'm going to ask my vote counters if you are prepared since I know this isn't on the vote sheet this way. Are you ready for 17 votes?

All right. Are they individual on the voting sheets? Oh, look at that. Great. With
that, we will start with the motion to remove color beet juice extract color. All those in favor to remove color beet juice extract from the National List raise your hands. Beet juice extract color.

(Show of hands)

To remove beet juice extract color. Okay. What's the -- So all the motions for sunset are to remove. We're going to vote on all 17 substances in a row. Correct.

CHAIR RICHARDSON: I know it looks as though beet juice may or may not be widely commercially available. I happen to think that there's enough of it. But most people do not necessarily think that. I happen to be voting to get rid of beet juice. But that doesn't mean that you guys have to vote the same way as I do.

(Laughter)

MEMBER CHAPMAN: All right. No problem. So right now we're going to vote on just beet juice extract color. And the motion is to remove.

(Vote taken by show of hands)
VICE CHAIR FAVRE: I have the vote of six yes, five no, two abstentions. The motion fails.

MEMBER SONNABEND: Before we move on, maybe I missed this when I was out of the room. But, Jean, did you say why this was one you recommended keeping and then you voted against it?

CHAIR RICHARDSON: This is a challenge for me because there appears to be plenty of it available in Europe. But on the other hand, most of the U.S. companies, they say that that doesn't necessarily make it fully commercially available to them. So it's just one of the ones where I feel that I can't vote to keep. But you shouldn't necessarily do what I suggest on this one.

MEMBER SONNABEND: No, of course not. But I thought I had read that this was one of the ones that it was dry versus liquid issue. One or the other was available and the other wasn't.

MEMBER CHAPMAN: I don't think that was clear in the comments. The dry comment came I believe from DNT stating no color was available in
dry form. Then there was a couple of companies that wrote in stating that. I believe Stonyfield and Global Organics both spoke to the availability of beets for their applications.

Tracy.

VICE CHAIR FAVRE: Just a clarification for the record. The vote was six yes, six no, two abstentions. The motion still fails.

MEMBER CHAPMAN: The next item is colors black current juice color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: We have a vote of three yes, six no, five abstentions. The motion fails.

MEMBER CHAPMAN: The next item is colors, pumpkin juice color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: We have a vote of two yes, 11 no, one abstention. The motion fails.
MEMBER CHAPMAN: The next item is red cabbage extract color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was two yes, 11 no, one abstention. The motion fails.

MEMBER CHAPMAN: The next item is black-purple carrot juice color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: Two yes, 10 no, two abstentions. The motion fails.

MEMBER CHAPMAN: The next item is blueberry juice color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: I have five yes, eight nos, three abstentions. The motion fails.

MEMBER CHAPMAN: The motion is correct or that was correct.

VICE CHAIR FAVRE: The count wasn't right though.

MEMBER CHAPMAN: Five.

VICE CHAIR FAVRE: Five yes, three
abstentions.

MEMBER CHAPMAN: Five yes, six no, three abstentions.

VICE CHAIR FAVRE: Six nos. I'm sorry. Six nos. I said eight. Yes, six nos.

MEMBER CHAPMAN: The next item is -- Do you want a roll call vote on the last one?

There's been a call for a roll call vote on the blueberry juice color.

(Roll call vote taken)

VICE CHAIR FAVRE: I have five yes, five no, four abstention. The motion fails.

MEMBER CHAPMAN: The next item is colors, carrot juice color. The motions is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote is four yes, seven no, three abstentions. The motion fails.

MEMBER CHAPMAN: The next motion is to remove colors, cherry juice color from that National List.
(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote is three yes, nine nos, two abstentions. The motion fails.

MEMBER CHAPMAN: The next motion is to remove chokeberry/aronia juice.

(Vote taken by show of hands)

The Chair is going to call for a roll call vote on this one.

VICE CHAIR FAVRE: Guys, just give me a little bit longer before you lower your hand if you would for me please.

MEMBER CHAPMAN: All right. We'll start with Richardson, Jean.

(Roll call vote taken)

VICE CHAIR FAVRE: The vote was seven yes, five no, two abstentions. The motion fails.

MEMBER CHAPMAN: The next item is elderberry juice color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was seven yes, five no, two abstentions. The motion fails.

MEMBER CHAPMAN: The next item is
colors, grape juice color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was seven yes, five nos, two abstentions. The motion fails.

MEMBER CHAPMAN: The next item is grape skin extract color. The motion is remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was six yes, six no, two abstentions. The motion fails.

MEMBER CHAPMAN: The next motion is for colors, paprika color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was five yes, seven no, two abstentions. The motion fails.

MEMBER CHAPMAN: The next item is for colors, purple potato juice. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was five yes, seven no, two abstentions. The motion fails.

MEMBER CHAPMAN: The next item is
colors, red radish extract color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was six yes, six no, two abstention. The motion fails.

MEMBER CHAPMAN: And the next item is saffron extract color. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was seven yes, five no, two abstentions. The motion fails.

MEMBER CHAPMAN: And finally colors, turmeric extract color. Motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was three yes, nine no, two abstentions. The motion fails.

CHAIR RICHARDSON: So what do you think? All the colors stay on the list. You're supposed to be happy now out there. But I think everyone got our message. So now I think we might just take a short 15 minute break.

It is now 4:10 p.m. So that would be 4:25 p.m. We'll get back and we'll finish up the
rest of the list in no time at all. Off the record.

(Whereupon, the above-entitled matter went off the record at 4:08 p.m. and resumed at 4:28 p.m.)

CHAIR RICHARDSON: Back on the record.

Tom.

MEMBER CHAPMAN: The next item on the agenda is dillweed oil.

CHAIR RICHARDSON: Please note that Harold is still here.

MEMBER CHAPMAN: Dr. Brines.

DR. BRINES: Thank you. This listing appears on Section 205.606 of the National List under E, Dillweed Oil CAS number 8006-75-5. Thanks.

MEMBER CHAPMAN: Dillweed oil is available in organic. It also meets the definition of a natural flavor and so can be used under that annotation. I had no comments supported relisting. This item should be removed from the National List. The subcommittee unanimously voted to have this item removed. Is
there any further discussion?

Seeing none, we'll move to a vote on dillweed. The motion is to remove.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was 14 yes, zero no. The motion passes.

MEMBER CHAPMAN: The next item is fish oil. Dr. Brines.

DR. BRINES: Thank you. This item appears on Section 205.606 of the National List under F, Fish Oil, Fatty Acid CAS numbers 10417-94-4 and 25167-62-8, stabilized with the organic ingredients or only with ingredients on the National List Sections 205.605 and 205.606. Thank you.

MEMBER CHAPMAN: Jean.

CHAIR RICHARDSON: Yes. Another simple one now, fish oil. Here we have obviously from a commercial availability point of view fish oil is not commercially available in organic form. And so therefore it is appropriately on 606. And the NOP does not presently have production status
for aquiculture at this time. So obviously that isn't going to change in the immediate near future.

Over the several years, fish oil has however become increasingly used as a supplemental material added to a wide range of foods to increase the content of Omega-3 fatty acids. There are some sources of medical literature that indicate that the fish oil's benefit to human health by contributing to healthy brain development, improving cardiovascular disease, diabetes, inflammation, etc., and other scientific data that says that fish oil is overrated.

Fish oil is used in a wide variety of food products, bread, pies, cereals, yogurt, cheese products, frozen dairy products, etc., in very small quantities. The fish oil used in these foods that we're looking at today constitutes only a tiny portion of the fish oil's produced since 81 percent of the fish oil goes worldwide to feeding livestock, pigs, aquiculture, etc.

The challenge for us on the fish oil is that the production of fish oil today is some of
the conservative criteria, such as the biodiversity. As some of our public commenters, especially those sort of in the public interest group area, state that production of fish oil today often violates the fundamental tenants of organic food production to promote ecological balance and conserve biodiversity.

That's just one example of many kinds of comments that we had from a broad range of public interest groups raising concerns about the use of fish oils in the feeds that we get nowadays. And there were many of those groups. And they had a broad range of comments like that.

For example, here's another one. Most fish oil for human consumption comes from the lower levels of the marine food chain such as mackerel, salmon, sardine and herring. But fish oils also come from deep sea fish and top level predators including cod, pollock, swordfish, etc.

There is some implication that fish oils, the harvesting of the fish oils, is having a negative impact on a broad range of the marine
trophic levels in a range of geographic areas in
the world. We can say with reasonable certainty
that in some parts of the world, such as Peru, there
may well be a control. In other parts of the world,
that is not the case.

It's not simple as you understand I know
when it comes to understanding the impact of fish
oils. Only a tiny percent is coming to these food
additives that we're adding in to processed
products.

Typically, the fish oil is not coming
from fish which are collected only for fish oil,
although again there's a broad range of opinion on
that depending on which of the public comments you
look at.

The public comments that come from the
companies that product the fish oil strongly
indicate and provide a statement as to the
significant need to have Omega-3, EPA and DHA fatty
acids. And in recent years, they state that
technology has emerged that allows food
manufacturers to add fish oil to foods and to allow
fish adverse consumers to be able to reap the benefits of Omega-3 without eating fish.

And, of course, there are many consumers that are very happy to have this fish oil added to their food when they may not otherwise get the fish oil. They could take it as separate fish oil supplements which is another point that was brought up by other groups.

We did receive extensive commentary, written comments, on the measurement of environmental contaminants in the fish oil supplements. And these are highly scientific documents that help us to see that there is a wide range of contaminant potential in some fishes, but that the ones that are used in the fish oil supplements have undergone extensive purification so that the consumers could have a high level of confidence in the fish oil that goes into the additives, the fish oil supplements.

The issue of necessity comes to light when we also look at bouncing off the -- setting aside just the health benefits assuming that there
may or may not be health benefits depending on which medical science you look at. I take a supplemental fish oil every day. I'll disclose that for the record.

But setting aside the health benefits controversy, fish oil may or may not be a necessary ingredient in organic foods. And that was raised by a number of the public interest groups that would ask that we would remove this material from the list.

The companies that produced them, of course, and many of the processors would say that we should not rush to delete the fish oils because they believe that the health benefits outweigh any potential contaminant impact and again reminding us that there is no organic fish oil available.

This is one of these things that you are just going to have to come to your decisions on for yourselves. Board Members, I don't have a perfect recommendation for you. You should note that in subcommittee we had a divided vote of the people that were there. Two said yes to remove, four said
no and one person was absent.

MEMBER CHAPMAN: Thank you, Jean. Any further discussion on this item? Colehour.

MEMBER BONDERA: Thank you. Thank you, Jean. I guess your fish oil supplement isn't organic. Sorry. We'll work on that.

My question is actually not specifically to you, Jean. But you can either answer or perhaps other handling subcommittee members are willing to respond. And my question is based on the public input that we've received in this round has that influenced any of the subcommittee members' thinking or reflections on this. And might have any of them either changed their position or reinforced their position based on what has come forth in the second round of public commentary for this Sunset consideration? That's my inquiry.

And like I said, I don't know if you want to respond, Jean, or if other members are willing to. Thank you.

MEMBER CHAPMAN: Lisa.
MEMBER DE LIMA: Not really an answer to your question. My mind was already made up before hearing public comment. I don't think it's compatible from an environmental perspective and I question the necessity as well. I was one of the ones who voted yes to removing in subcommittee. And I'm still going to vote that way now.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: I struggled with this and thought long and hard about it. I was one of the ones who voted to keep it coming out of committee.

And I can't say that solely the public comment changed my opinion. But we voted on this one before we took up the issue of nutrient, vitamins and minerals. This is not a vitamin or a mineral, but it is a nutritional additive, a fortification if you will.

In the course of studying that other issue mostly, my thinking came around to nutritional fortification of something should be a choice that a consumer can make independent of
putting it into the product.

Like Jean, I take a supplement and the supplement that I take I look very carefully at the label to see if it has a statement about heavy metals, that it's been screened to see if it meets a voluntary standard, to see if they disclose where the fishery is, all of the things that we're talking about in evaluating it.

But I just don't see that when you're buying a product that has it just automatically in it that you have all that access to all that information. So you're basically your decision then on trust of the company name or the brand name of that company.

I feel that my number one concern is that it doesn't seem to be necessary to producing the product, 6517(c)(1)(A)(ii). While it's not harmful to human health, the jury is still out in the environment and from overfishing issues. And I don't feel like we're equipped to regulate it to only a fishery that has a certain amount of control over it because we don't have enough information
on the other fisheries like we've gotten on the Peruvian regulated fishery. And it might give unfair advantage to one company over another with the source there or not source there.

So after deliberating on all of that, I have decided to change my vote and vote against this continuing, a vote to remove it.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: It is quite unfortunate that we're doing this immediately after the colors when we were all so stressed and confused about colors. It feels like a little bit more like the more you start the worse it stinks on this one.

But I'm sort of torn on this one. I am concerned about the environmental impact. I'm also concerned about the market disruption if we suddenly make something not available that has already gone into products. And while I agree it's not essential, there is a certain amount of consumer expectation now where it's in products.

Also if we do take it off we have a
couple of things contextually that we need to consider. The first is that if aquiculture standards come out and they approved and put into effect, we will essentially have organic fish oil potentially. So in some ways the question is moot in regards to that.

The other thing is if rulemaking ever is completed on the DHA, the only supplement that you could use for Omega-3s would be DHA algal oil which is in limbo land I guess. So regardless I'm a little conflicted about what's the best thing to do here which doesn't offer anybody by way of guidance. But there it is.

MEMBER CHAPMAN: I'll go and then Zea. It's my opinion that we need to be consistent in our evaluation of these substances. The environmental concerns of fish oil for handling products are identical to the environmental concerns for liquid fish products in farming which this Board just voted to renew by a vote of 13 in favor of it remaining on the list.

We can't pick and choose which products
have environmental concerns. And these are real concerns. I think there is a need to reevaluate the approach and use of marine products and organic products at a holistic level including at the farm, at the ranch, and in the handling facility and the processor.

And it's my opinion that fish oil could be annotated to further improve the listing. But at this point all we can consider is to remove it or not. Removing it now will (1) not resolve the root concerns we have with fish oil. However, if we wait to further annotate it we have the potential to create a market for sustainable fish oil that we all want to see.

(2) Consumers have a choice. They can choose to buy products fortified with fish oil and they can choose to buy products not fortified with fish oil.

(3) Tracy mentioned this. We could stun what is a nearly emerging organic seafood industry and a byproduct that will be critical to make them profitable as soon as possible.
And (4) lastly, it puts organic products at a disadvantage when on shelves next to natural and non-GMO products for further health advantages at a lower cost. Is this small supplement that we could help make a better market for it to further annotation at a later time better than that 95 percent of the product that's organic that will no longer be available?

I struggle with that myself. This is one of the hardest materials on the list. I'll leave it there. Now, Zea.

MEMBER SONNABEND: A couple of points. First of all, if we vote it off now, this is not a sudden change. People will have a year and a half to still sell products until it actually sunsets in 2017. That time could be used to educate people as to fish oil supplementation versus having to have it in their product.

Second of all, I completely disagree with Tom's contention that any consumer who is now buying organic with fish oil will switch to nonorganic milk because it's next to it on the
shelf. I think our organic consumers are smarter and devoted to organic. And we saw no data to support that someone would just buy conventional milk or whatever you called it, natural milk instead of organic milk.

Yes, I would be happy if instead of this it was allowed and made with organic and not completely organic. But that is not on the table.

MEMBER CHAPMAN: I have Harold.

MEMBER AUSTIN: It's a difficult discussion. It really is. Public comments could sway me either way. But sitting on this Board as one of the two handler reps, we do have stakeholders out there that have got formulations that are in place using this material not just as an additive, but also as an ingredient more than just for the Omega-3s.

Some people can't eat fish. And I know they can take a supplement. But we've got stakeholders that have got products out there, materials out there that have been formulated with this.
I think Tracy hit on a little bit that at some point in time if we get the aquaculture standards in place, if we can ever get to a point where we've got a decision on that, that will help clear up part of this issue that we're having this discussion on today. I'm torn, but I'm still going to support the continuation of keeping this on the National List at this time.

But I think we need to send a message to those individuals that this is a difficult one. If it should stay on the list, it's definitely one of those ones that's not going to probably be there forever.

MEMBER CHAPMAN: Lisa.

MEMBER DE LIMA: To Tom's point about maybe being able to annotate it so that we could require sustainability around fish oil, I think it's a nice idea. But it sounds really, really hard in practice. Even when you're just looking at single species like I do when I'm sourcing for the retail store, it's really hard.

And there's a lot of different
definitions of sustainability and what's rated
green, what's rated yellow, what's red and I think
it would be a huge challenge for us to be able to
come up with something that the rest of the
sustainable fish industry hasn't come to an
agreement on.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: I am just sort of
thinking through logistics. And again I'm still
conflicted about how to vote here. But if we vote
fish oil off the list, it sunsets in 2017. We have
aquaculture standards that come in and come into
place. And eventually we have organic fish oil
again. Then we've got almost this roller coaster
ride for producers where it's off for a while
potentially with some sort of gap depending on when
the standards get into place and then an
opportunity to reformulate with it again. I'm
kind of wondering what to do about that.

MEMBER CHAPMAN: Ashley.

MEMBER SWAFFAR: I'm really on the
fence and a lot of what Tracy said is exactly how
I feel. I really think that aquiculture is going to come. That will be our classes like fun times. And I would really worry about the handlers that wrote in and said that they use fish oil in a lot of milk formulations and things like that.

If that would go away, who knows when we'll get aquiculture. Maybe there will be a gap there. And I think that's part of a market that consumers could be very confused on.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: Now I'm thinking if 81 percent of the fish oil goes to aquiculture have they petitioned this for organic fish that is coming down the pike? And if they haven't, then they have to use organic fish oil to feed those organic fish, don't they? Or what?

So I don't think maybe organic fish oil will be on the market because if they have to have 100 percent organic feed for those organic fish they have to give them all the fish oil.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: There is a provision
for phasing in from nonorganic to organic and the provision for fish meal. So there is that sort and addresses it a little bit.

MEMBER CHAPMAN: I can't speak to the price of products that exist, but in terms of agricultural land based products, generally food ingredients get a premium over feed ingredients. So food ingredients get a premium or feed ingredients if there's a shortage. Mac.

MEMBER STONE: So we take a spoonful of cod liver oil this morning. But if the food processors/manufacturers say they're adding these product it's not cheap or easy and the market forces are telling them that they're sell more milk if they put these things in it or yogurt or whatever it might be.

I don't know if it's necessary, but if you ask the marketing people then I think they're calling for more milk which means more cows which means more farms. And I guess I'm okay with that.

CHAIR RICHARDSON: I'm a consumer rep on the Board. And of course I have two sets of
consumers out there. One set of consumer wants us to remove the list because of the concerns, maybe some real, maybe some exaggerated. It's hard to know from the literature. There's a wide range of literature on this because of concerns of a combination of environmental, marine concerns and also for a potential of contaminants that remain in the less purified forms of fish oil.

And then on the other hand, you have those consumers that say fish oil is really good for you because it's healthy and it's going to do something good for me and my kids. So I'd like to see it in the milk and the cookies and all the other things.

Both those sets of consumers are out there which further adds to the conflict that we feel in deciding whether we should keep this or remove this material. So for all of us it's a really difficult decision to come to. I don't have a perfect answer for it.

I do know that when you purchase your fish oil in whatever form you're going to take it,
a liquid form or a pill form or whatever it is, you always spend a lot of time looking for the forms that have been the most highly purified. You look for some sort of annotation that then says we're going to put some sort of requirements in an annotation as to not only how pure it is or the test levels or the oceans or the area that it comes from or that fact that it shouldn't come from some of the mammals which are included in the fish oil and the TR which I didn't like to see as you know. But it also included some seals and whales which seems to me like an odd thing to see in fish oils instead of mammals.

There were a lot of issues that were raised from a consumer's point of view from both aspects for us to consider as we deliberate on this. It's not just necessity although that certainly comes into it. But it is also a matter of fact consumer choice. If they choose to have fish oil, then there are other places they can get it other than just as a food additive.

MEMBER CHAPMAN: Any additional
discussion on this item? Harold.

MEMBER AUSTIN: I want to go back that it's not just an additive. It's the ingredient that's being used. So it's something that's part of a formulated material for texture. You look at the gummy confections. It's in part of our written document, Jean, where it's actually used as part of their formulation product.

It's not for the addition of the fish itself but as an ingredient that has consistency, texture. I'm not sure exactly what all they're using it for. But they specifically said that it's an ingredient used in the gummy confections, gummy nutritional supplements, jelly beans, etc.

We do have stakeholders that are using it in different ways for different reasons. So I think we have to be cognizant of that.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: Jean, when you were doing your research, I can't remember if you've answered this question. So pardon me. But did you get a sense of what percentage of fish oil is
from fish caught specifically for that purpose versus that which is a byproduct of other fishing products?

CHAIR RICHARDSON: No, I didn't get a really clear sense of that.

MEMBER CHAPMAN: Any further discussion?

Seeing none, we'll move to the vote. The motion is to remove fish oil. It came from the subcommittee with the vote of two yes, four no, one absent.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was eight yes, five no, one abstention. The motion fails.

MEMBER CHAPMAN: Next item on the list if fructooligosaccharides (FOS). Dr. Brines.

DR. BRINES: Thank you. This substance appears at Section 205.606 (H) Fructooligosaccharides, CAS number 308066-66-2. Thank you.

MEMBER CHAPMAN: I will refer to this product by its short name, FOS. FOS is one of two
inulin fiber products on the 606 list. It is a
nondigestible, soluble prebiotic fiber. Little
new information was provided since the first
reading, but it included some new companies
speaking to the unavailability of FOS. Comments
from interest groups repeated the earlier comments
that the substance was not agricultural. But upon
reviewing the draft guidance, NOP 5033, on
agricultural/nonagricultural classification, based on the information contained in the new
technical review, the handling committee continued
to believe the agricultural classification was
correct.

The material satisfies OFPA criteria.
And the handling subcommittee recommended its
renewal. Retention of this material was part of
a justification for the later recommendation to
remove the second inulin product on the list.

Open it up for discussion. Jean.

CHAIR RICHARDSON: Could you clarify
how widely used it is and tell me whether it's
necessary?
MEMBER CHAPMAN: So it's used in several forms as a soluble, prebiotic fiber flavor enhancement. And it's used in yogurt, infant foods, bake goods, beverages and other dairy products.

CHAIR RICHARDSON: So what if it wasn't there.

MEMBER CHAPMAN: It's a liquid form of inulin, a short chain. Presumably you would have to find another suitable fiber product.

Any further discussion on this item? I have Mac, then Zea.

MEMBER STONE: I am still kind of bothered by this. It's a bulking agent, but then it's indigestible. It seems like those are not quite really where we want to go. Or that is where we go.

MEMBER SONNABEND: And like Jean, I'm having trouble with soluble, prebiotic fiber and why like bran wouldn't work that was organic or oats or other fiber things that you could put in your muffin.
MEMBER CHAPMAN: But those don't provide a quality that is used in bake goods, moisture and it's also used in yogurt which bran and oats would be different.

MEMBER SONNABEND: Okay. But how about the dried orange pulp which is coming up which they said was also used for moisture in bake goods?

MEMBER CHAPMAN: Fibers are often used for moisture retention, yes.

MEMBER SONNABEND: So how is it different than an agricultural material like dried orange pulp?

MEMBER CHAPMAN: This is also an agricultural material. But dried orange pulp is in a dried form, not a liquid form and it has a different functional basis for its usage.

CHAIR RICHARDSON: Can you clarify why the agricultural basis of it?

MEMBER CHAPMAN: How we determined it was agricultural?

CHAIR RICHARDSON: Right.

MEMBER CHAPMAN: There are two common
methods to produce FOS. One is from inulin and one is from sucrose. Inulin derived FOS is found in chicory, artichoke, agave and other plants. Chicory inulin is extracted from the source material via water extraction. The resulting inulin undergoes a partial and schematic hydrolysis using an enzyme, inulin. The hydrolysis breaks the long chain inulin into shorter chain FOS.

So inulin is a series. It's a sucrose molecule connected with a whole long chain of fructose molecules which can range from I think two to 60. And the FOS is the chains between two and ten. The specific range and it has a specific set functionality characteristics.

The second form of production is from sucrose where sugar cane or the possibility of sugar beets extracted and fermented with a bacteria. The cells are mobilized for high surety of FOS and can accomplished by creating beads of that item in calcium alginate. The cells are again the subject of hydrolysis enzymatically and then
transfer the fructose chains onto the sucrose chains.

I see Emily raising her hand.

MS. BROWN ROSEN: I just want to bring up a point I don't think is in your summary, but was in the petitions originally was that both of those substances were, one of the purposes of them in the dairy products, as a prebiotic. So that enabled them to make an enhanced structural, functional claim about enhanced calcium absorption of the product. And that's the main reason it's being added. That was the justification.

CHAIR RICHARDSON: It's so much fun to talk to Tom. Why can't I just have it from organic sugar cane or sugar beet? Then it could be organically produced from the organic sugar cane or sugar beet of which there is plenty available organically.

MEMBER CHAPMAN: Of sugar cane. Not of sugar beet. I don't have the answer off the top of my head on that one. I do know the producer commented the first time under I think it was the
market size availability issue on the sugar cane production method. Chicory inulin is the primary form of inulin and it's not available in organic form.

Any further discussion on this item?

Seeing none, we'll move to a vote on removing fructooligosaccharides from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: Eight yes, six no. Motion fails.

MEMBER CHAPMAN: The next item on the National List is galangal frozen. Dr. Brines.

DR. BRINES: Thank you. The substance is included at Section 205.606 of the National List under I, Galangal Frozen. Thank you.

MEMBER CHAPMAN: Galangal frozen, this product appears to be available in organic and we have received no further comments speaking to its unavailability. The item should be removed from the National List and it was voted to be removed unanimously from the subcommittee. Any further
discussion on this item?

Seeing none, we'll move to a vote on removing galangal from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote is 14 yes, zero no. The motion passes.

MEMBER STONE: Actually, that's 13 yes and one yes, sir.

VICE CHAIR FAVRE: Thank you for that clarification.

MEMBER CHAPMAN: The next item on the National List is gelatin. Dr. Brines.

DR. BRINES: Thank you. This substance is included at 205.606 of the National List under J, Gelatin, CAS number 9000-70-8. Thanks.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: Thank you. Gelatin can come from cows, swine or fish. It's used in a lot of products as a clarification or fining agent as a stabilizer or thickener and in capsules. It may either be an ingredient or a
processing agent.

There is starting to be some organic gelatin available from cows. But there definitely is not from fish from reasons we just discussed.

In the public comments, we didn't get that much on gelatin, but clearly we got people who need gelatin. And the fish gelatin is not available. And there doesn't seem to be a consistent or abundant enough supply of organic gelatin for all the uses.

Some people express concerns over the use of animal gelatin from conventionally raised animals and the level of contamination that might be present from conventional practices. However, there is no specific new evidence that such gelatin has been identified as harmful in the organic food.

We didn't end up doing an ancillary substance proposal for this which we said we were probably going to do. We sort of ran out of steam because we were rather overworked this summer.

But one of the ancillary substances is sodium hexametaphosphate which is used for
cross-linking which I don't really know what that means. But we may once we work out ancillary substances be bringing a proposal for this at a future time.

MEMBER CHAPMAN: Any further discussion on this item?

MEMBER MARAVELL: Just anecdotal comment that it appears that beef bones anyway which are now en vogue or all in fashion are being saved from grass fed and from organic animals and being so identified.

So I'm just saying that there's a trend to spread and save organic bones. And we sell out all the time our bones. And we have processors wanting to buy bones. So there is a market there.

MEMBER CHAPMAN: Any further comments? Discussion?

Seeing none, we'll move to a vote. The motion is to remove gelatin from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was three yes, nine no, two abstentions. The motion fails.
MEMBER CHAPMAN: The next item are gums, arabic, carob bean, guar, locust bean. These will be heard as one item. Dr. Brines.

DR. BRINES: Thank you. The substance is included at Section 205.606 of the National List at K as gums, water extracted only, arabic, guar, locust bean and carob bean. Thanks.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: Thank you. This listing for gums has four different names that refer to three different products, because locust bean and carob bean are two names for the same botanical plant. It is, I think, unfortunate. This is one of the very early ones, as I mentioned, that was put on the National List from the beginning. And it's sort of unfortunate that it's on there in a combined listing. But these items have very wide variety of uses as binders and thickening agents in a very wide variety of foods. What the problem becomes is that guar and locust bean gum are pretty common now in organic form, whereas gum arabic is absolutely not available.
I, who am a diligent label reader because of my allergies, only saw organic gum arabic on one product for the first time in the last month and have never seen it before. While I think we're getting close to removing guar and locust bean the work that would be involved in the cumbersome process of separating these things on the National List and only removing some of them has prevented me from doing this, but we would entertain future petitions to remove those two of the gums.

But in the meantime because gum arabic is necessary and has some different characteristics than the other two, I'm recommending keeping them on the list. Public comments were generally favorable, although of course they pointed out, too, the dangers of conventional agriculture, the alternatives that come from seaweed or microorganisms to make gums and the fact that a combination of gums is often needed in a product rather than just one single gum.

MEMBER CHAPMAN: Thank you. Francis.
MEMBER THICKE: We used on our dairy processing for a saucer product we use organic guar gum and locust bean gum. And we don't use arabic. But I think you're right. They should be separated out because we never had any trouble getting these other organic.

MEMBER CHAPMAN: Any other discussion?

Colehour.

MEMBER BONDERA: From what I heard these should be separated, but we would await a public system to do, or we could pursue it from inside the NOSB.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: Someone in NOSB totally could do it. I have my priority list for the next semester, and this has just not risen to the top. But someone else is welcome to do it.

MEMBER CHAPMAN: Any further discussion? Colehour.

MEMBER BONDERA: I apologize. I am not sure I do or don't understand the system very well. But I hereby request that this go back to
the subcommittee or go to the subcommittee with a request to put on their internal work agenda to pursue that change that we just discussed. Thank you.

MEMBER CHAPMAN: I will raise that with the subcommittee. Any further discussion on this item?

Seeing none, we'll move to a vote. The motion coming from the subcommittee is a motion to remove gums, arabic, carob bean, guar and locust bean from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was zero yes, fourteen no. The motion fails.

MEMBER CHAPMAN: The next item on the national list is inulin-oligofructose enriched. Dr. Brines.

DR. BRINES: Thank you. This substance is included in Section 205.606 of the National List under L, Inulin-oligofructose enriched, CAS number 9005-80-5. Thank you.

MEMBER CHAPMAN: Inulin-oligofructose
enriched is the second of the inulin products on the National List. It's a nondigestible carbohydrate that's used to increase calcium availability and adsorption as a soluble dietary fiber and is a noncaloric sweetener. It also has functional effects on texture in food. It's used in many foods including yogurts, bake goods, candies, jams and other dairy products.

The oligofructose is another name for FOS, the same item that we just voted upon. So this is in essence inulin enriched with FOS. Organic inulin is available from agave from some suppliers out of Mexico. Given the availability of organic inulin and the separate listing for FOS, information from certifiers of operations that they have switched to organic inulin and the absence of information on the lack of availability, no comments seeking for this item remain.

The handling subcommittee recommends this item can be removed from the National List at this time. Is there any further discussion?

Seeing none, we'll move to a vote.
(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was 14 yes, zero no. The motion passes.

MEMBER CHAPMAN: The next item is kelp.

Dr. Brines.

DR. BRINES: Thank you. This substance is included at Section 205.606 of the National List at M, Kelp, for use only as a thickener and dietary supplement. Thanks.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: Kelp is a term for seaweeds belonging to the group algae phaeophyceae in order of laminariales. It's been very confusing for the listing as we've discussed both in public comments and various discussions among the Board that this gives us a wide range and we're not very clear about which version of kelp we're talking about. But it does generally refer to the seaweeds belonging to the brown algae.

There are some other edible kelps in different families, sometimes called kombu, sometimes not. Again, it points out the point of
needing to be a little more clear on specific Latin names.

Public comment was mixed, with some citing the importance of material and long history of use, while others expressed concerns regarding the accumulation of pollutants and heavy metals and the potential for overharvesting. One group suggested the Board consider an annotation requiring testing for contaminants and suggested the handling subcommittee investigated while wild crafted, organic kelp would be available. Finally, one commenter suggested the consideration of kelp as a flavoring meaning to expand its annotation from specifically for use only as a thickener and dietary supplement.

As we've discussed on various other products, again with the sea product like this, it feels like we're sort of picking and choosing with the difficulty with being consistent with our application. So, again, we've had discussions about maybe having more systems approached, global conversation if you will about the sea products.
Thank you.

MEMBER CHAPMAN: Any further discussion on this item? Jean.

CHAIR RICHARDSON: An amusing piece of trivial, but maybe not so trivial, is that the cows for example the kelp that you give them, it has to be organic in their feed. But for humans apparently, okay, it's not. Just want to mention that.

I have a great deal of trouble voting to keep this word kelp on the list because it lacks the necessary scientific basis. We don't know what the Latin names of all the species are, and it's broadly used differently and interpreted differently in different parts of the world. And it includes many, many hundreds and hundreds of species.

I realize that whatever happens we are going to take all these seaweedy, fish things back to the subcommittee and determine more holistically for across all the subcommittees how we can best deal with them. But it's very hard for
me to vote to keep something with such an incredibly broad, non-specific category. I know that's how it was put it, but scientifically I tell I just don't know that I can do it.

MEMBER CHAPMAN: Thank you. Francis, then Zea.

MEMBER THICKE: I was going to say the same thing Jean did that recently it's become required to have organic kelp for livestock and I can buy it by the 50 pound bag of pellets and not have any trouble with availability. So I don't know if anybody can clarify that why we need to have it available in 606 for humans.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: I can't clarify that, but I can clarify one point Jean made which is the woman from Cornell who testified about the ascophyllum overharvesting yesterday, I talked with her after at the break.

She did make it clear to me that the word kelp scientifically does mean laminariales. That's the exact order that Tracy mentioned. And
that all scientists do understand when you say kelp that means that. And that also they grow a foot a day. So there isn't the overharvesting problems that there is with species of ascophyllum she was talking about in most situations where it's harvested from.

So I realize that the vernacular kelp doesn't just refer to the scientific name. But scientifically what it says here is correct according to this one thing.

MEMBER CHAPMAN: So I have I think Emily wants to speak and then Nick and then Jean.

MS. BROWN ROSEN: The reason it has to be organic for livestock feed is that it's class here is agricultural. And livestock does not have an allowance for commercial availability of agricultural items. So that's where it is from.

MEMBER CHAPMAN: Thank you. Nick.

MEMBER MARAVELL: Speaking up on behalf of livestock farmers and my herd, don't take our organic kelp away and give it to humans.

MEMBER CHAPMAN: Ashley.
MEMBER SWAFFAR: I have a question on the handler scientist. Do you know if the kelp that's available in organic form for livestock can even be used in the forms that handlers are using it?

MEMBER CHAPMAN: I don't know the answer to that question. I will make the same comment that I made before as Nick makes an interesting point. I don't believe we got a good amount of data on availability of organic versus nonorganic and the market demand.

But human-consumed foods can generally afford a higher price than feed. So if the availability is not there, then you may not be able to buy your kelp anymore by the pallet-load.

MEMBER MARAVELL: And I might add that the price of kelp goes up and down during the year depending on its availability. It doesn't go up and down a whole heck of a lot, but it's not like this constant price. So I know there are minor availability issues.

MEMBER CHAPMAN: But I have no
MEMBER SONNABEND: I did not see public comment this round concerning organic kelp in particular like whether it was a form that they needed for their thickening agent that didn't exist organically or whether they couldn't get organic. Did I miss some, Tracy or anyone? Was there specific comment that I didn't notice?

VICE CHAIR FAVRE: No, I didn't see anything specifically. Most of the comments I received were from the first round.

MEMBER CHAPMAN: Anything further? Lisa.

MEMBER DE LIMA: Question for Jean. If it did have the scientific name, then would you lean towards keeping it on there because it would be up to the inspector to verify that they're unable to get it organically and thereby are using the nonorganic? And right now they just can't do due diligence is what you're saying.

CHAIR RICHARDSON: Well, I'm still not convinced that when the word kelp is used. I
understand the laminariales group pretty well. But it's being gathered and harvested and comes in, that doesn't necessarily mean that all the stuff that's in that group called kelp is going to be in fact in the laminaria group. It's going to be a broader range of things.

So I don't think that we've really been sufficiently specific in saying that by this we only mean these species. If it had the Latin names, I'd feel a lot more comfortable about it because I don't think you can just sort of say it's just laminaria because that isn't really how it's practically done in the field when the fishermen go out. Ah, it's all kelp. I mean we haven't been as fussy about it as we ought to be.

And I know that some of the kelp, some of the individual laminaria that are those nice broad ones with those spikes, the grow really fast. I've seen them bombing it on the coast of Maine. It grows incredibly fast in season bays. So it is possible and it could be encouraged to be actually grown under organic conditions when we have of
course the aquatic standards all passed and so forth.

I think I just want to see the Latin names for all these seaweeds. That's what I want to see to be sure that we can verify that actually it is in the right group when we go out there and look at it. We know that the seaweeds all over these shores all over the place are all being differentially overharvested in different areas.

MEMBER CHAPMAN: Mac.

MEMBER STONE: I guess I'm having trouble. If it is readily available organic for livestock feed, it seems like it would be available for human feed. I guess if it does stay on the list that maybe when the committee is looking at all these things a little translation of this is used only as a thickener and dietary supplement. It doesn't say or. So that means it would have to have a dual purpose. A little translation of that annotation.

MEMBER CHAPMAN: Yes. And I'm similarly concerned that you consume human feed.
MEMBER STONE: You were in Kentucky last year.

MEMBER CHAPMAN: Tracy.

VICE CHAIR FAVRE: So might we consider this being something that we wanted to add hopefully a fairly quick work agenda item to add some Latin names for clarity for that. Would you be comfortable with that? Do we need to do that as a subcommittee?

CHAIR RICHARDSON: I see that as part of that general discussion that we're going to have to look at various forms to decide if we need TRs for this range. It's like you said. The whole system look at all these fish products to be sure that we're asking the right sort of questions and if necessary have a TR which looks like we would do and also to have some annotations.

MEMBER CHAPMAN: Any further discussion on this item? Colehour.

MEMBER BONDERA: I apologize for my ignorance and unpreparedness. Jean, maybe you or somebody else can clarify for me or maybe Lisa can.
This item which is 606 M in which there is a statement in your recommendation that suggests the confusion might need to lead to changes in what these different list things, et cetera, are.

We are not voting on this one on it's completely separate from 606 Y. Okay. They are totally different even though the words in here are the same.

It depends on what -- I'm sorry.

(Off microphone comment)

Right, but wakame is listed as -- maybe I'm not reading it right -- I guess there is some confusion. It doesn't say it is that, right? So it's just the confusion is the problem, not that it is wakame.

VICE CHAIR FAVRE: Yes.

MEMBER BONDERA: It refers to wakame. It's not saying it is wakame.

VICE CHAIR FAVRE: Right. When I was doing the research on the different varieties trying to look at kombu versus wakame versus kelp even the literature is a little confused about it.
So I had to keep digging a little further to find out which specifically was being referred to. And, yes, it is confusing.

MEMBER BONDERA: So this one M is not wakame.

MEMBER BONDERA: That's correct. This one is called kelp. There's a separate listing for wakame.

MEMBER CHAPMAN: Mac.

MEMBER STONE: I am going to vote to keep this on because I can trust the processors and certifiers to use the organic version because they're required to if it's available. And if it's readily available, the system still works rather than make a decision if there is a slight difference and we were to take away a tool.

MEMBER CHAPMAN: Any further discussion on this item?

Seeing none, we'll move to a vote. The motion comes from the subcommittee to remove kelp from the National List.

(Vote taken by show of hands)
VICE CHAIR FAVRE: That was four yes, eight no, two abstentions. The motion fails.

MEMBER CHAPMAN: Next on the list is konjac flour. Dr. Brines.

DR. BRINES: Thank you. Konjac flour is included at Section 205.606 of the National List under N as Konjac Flour, CAS number 37220-17-0. Thank you.

MEMBER CHAPMAN: Konjac flour is used in traditional Asian foods for its consistency and thickening capabilities. It comes from a yam called the elephant yam. There is some foreign availability, but searches of products grown aboard is somewhat difficult as equivalency agreements are not searchable in the organic integrity database. And I will take this moment to encourage the program to continue to invest in the organic integrity database including researching equivalencies as part of that system.

One processor spoke in support of this material as a potential or future product development. And a trade association spoke in
support of the material noting that the foreign supply concerns provided no data. And they had noted that they had not investigated those supply ordinance specifically.

This motion comes with a recommendation from the subcommittee to remove this item from the National List. Any further discussion? I should say it was a split vote four yes, three no. Zea.

MEMBER SONNABEND: I thought I was the lead on this one since I wrote this part.

MEMBER CHAPMAN: I'm so sorry. I had it on my name.

MEMBER SONNABEND: Nonetheless, I guess those people who voted to remove it went to those websites and thought that was a reliable supply of organic sourcing. I did not feel that. However, I guess it's also not widely used in organic food because we didn't hear very much public comment on it.

But I feel like this is a valuable item. Konjac flour, if it starts being used, maybe it's a soluble prebiotic fiber that diabetics can use.
I mean, I know diabetics could use it because it doesn't cause a blood sugar spike which is the main reason that it is widely used in weight loss supplements.

MEMBER CHAPMAN: Any further discussion on this item?

Seeing none, we'll move to a vote of removing konjac flour from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was nine yes, five no. Motion fails.

MEMBER CHAPMAN: The next item on the National List is lecithin, de-oiled.

DR. BRINES: Thank you. The substance is included on Section 205.606 of the National List under O, Lecithin, de-oiled. Thank you.

MEMBER CHAPMAN: Zea, this time I'll let you read your own material.

MEMBER SONNABEND: Okay. Lecithin is a very widely used ingredient in food, emulsifier dispersing agent and to reduce hydration property of powders in water and milk products. It occurs
naturally in several foods such as egg yolks and soybeans.

Historically, it's been produced commercially from primarily soybeans. But there are now alternative sources available from sunflower, canola and other crops.

In 2009, the NOSB corrected the listing for lecithin by removing lecithin bleached from 205.605(b) and adding it to 205.606 in the de-oiled form only. This also corrected the terminology in how lecithin is referred to.

Fluid form of lecithin widely available from organic soybean, but the defiled form we heard conflicting testimony at the spring meeting and at this meeting. We heard that there was a supplier of organic defiled soy lecithin who has had plenty of organic lecithin for the last two years. That commenter stated that the resistance is mostly a matter of convenience and price.

Many companies who use lecithin however stated there was consistency of supply issues, that they were reluctant to rely on just one supplier
for such an important ingredient. And there are unique functionalities that are not achieved either by liquid lecithin or other powder lecithin. So they need to have the particular nonorganic lecithin.

Furthermore, there was no public comment at the spring meeting that sunflower or other lecithins were available as organic. The commenter here yesterday said that they are moving towards organic sunflower lecithin which did not convince me that there is organic sunflower lecithin readily available, preferably from more than one supplier.

I think progress is being made in moving forward towards organic lecithin. And a petition could be refiled to let lecithin into soy and other forms of lecithin and to remove the soy lecithin potentially. But this was beyond the scope of me being able to tackle in a sunset review. And as someone who would rely on the sunflower lecithin or non-soy lecithin I feel that this needs to stay on the National List.
MEMBER CHAPMAN: Do we have any discussion of this item? Mac.

MEMBER STONE: I spoke with several certifiers and they said there is various uses at different times of the year, availability and different forms. So it was expressed to me that there's reason to keep it on 606.

MEMBER BONDERA: I'm sorry. I didn't hear your last clause. There's what on 606? I'm sorry.

MEMBER STONE: To keep this material available on 606.

MEMBER CHAPMAN: So I have Francis and then Jean, then myself.

MEMBER THICKE: I think that the suppliers that we have of defiled lecithin are sort of in a catch-22. They've been on hold for a while here and now saying they can supply the U.S. market with soy lecithin. But until it's taken off 606 they really are caught because people are buying it elsewhere because it's conventional.

And they also told us they could gear
up substantially in that there are other plants
around the world that are coming online for soy and
more than one plant for sunflower. So it seems to
me that we need to take initiative to get this thing
going so that they can gear up and we can keep going
forward.

MEMBER CHAPMAN: Jean. Do you want to
respond to that, Zea?

MEMBER SONNABEND: Yes, the more than
one plant for sunflower was not necessarily online
yet. He said they're moving towards it.

MEMBER THICKE: Correct. But there's
almost two years before sunset.

MEMBER CHAPMAN: Jean.

CHAIR RICHARDSON: Yes. Zea, do you
think that this would be one of those ones that we
should send to the subcommittee so that we could
propose an annotation to separate the two forms?
Because I think what you're saying is it makes
logical sense it would be better to have the
lecithin separated into soy as opposed to
sunflower.
Yes. So we will ask the Chair to bring that one up as well.

MEMBER CHAPMAN: I also want to note that the one plant that the commenter noted was in Ukraine which is a country in the midst of a civil war and occupation. Not exactly a country I'd say has strong availability requirements.

Any further discussion?

MEMBER SWAFFAR: I'd just like to say I support going back to subcommittee with that annotation change.

MEMBER CHAPMAN: Yes.

MEMBER MARAVELL: Yes, I think we should recognize that there might be a variety of oil seed crops, not just sunflower, but canola and others. When you go back to subcommittee on this make it flexible enough because I'm sure if we expand the market the American producers will come up with a supply.

MEMBER CHAPMAN: Yes.

VICE CHAIR FAVRE: Just one brief comment in response to Francis' comment, I actually
agree with you except that, given that it's on 606, this company that says they're waiting for demand, if they provide the product in organic form and it's commercially available, producers are required to use it. So I don't know that taking it off 606 is truly a barrier to him having increased demand, because the demand would be there anyway.

MEMBER THICKE: I wonder about if they're really using it. And I want to first of all thank Tom for this nice clip art here. But then I look on the box and it's organic. But there are two listings for lecithin, and one is starred that it's organic and one is starred that's not organic. I'm not sure exactly why that would be. One is starred and one is not starred, yes.

MEMBER CHAPMAN: It's an excellent question. They're both subingredients of an ingredient that we purchase. I can't answer your question at this time. But I'd be happy to follow up with my product development team and get back to you.

Any further discussion?
Seeing none, we'll move to a vote. It comes to us from the subcommittee as a motion to remove lecithin de-oiled from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote is five yes, nine no. The motion fails.

MEMBER CHAPMAN: Thank you. And I can actually answer that question now. I looked at the ingredient panel further. The product that does not have organic lecithin has country of origin as Europe. And Europe has an equivalency with the U.S. Europe does not require organic lecithin.

Moving on the list, lemongrass.

DR. BRINES: This substance is included at Section 205.606 of the National List at P as Lemongrass Frozen. Thank you.

MEMBER CHAPMAN: Lemongrass -- this is very short -- frozen, sufficient supply. Should be removed. Any further discussion on this item?

Seeing none, we'll move to a vote to remove lemongrass frozen from the National List.

(Vote taken by show of hands)
VICE CHAIR FAVRE: The vote is 14 yes, zero no. The motion passes.

MEMBER CHAPMAN: Next on the list is orange pulp, dried.

DR. BRINES: This substance is included at Section 205.606 on the National List under Q as Orange Pulp, Dried. Thanks.

MEMBER CHAPMAN: This substance is also known as citrus fiber. We received no comments the first round. This round received a comment from the producer and patent holder of this product. So there is only one manufacturer of this product.

He made a fairly convincing argument in the web-based testimony that this product is not commercially available in organic. And they did say that the product is used in organic applications. However, no member of the industry spoke up in support of this material.

This item comes to us from the subcommittee with a recommendation to remove. I'll open it up for further discussion at this time.
1 Harold.

MEMBER AUSTIN: Sitting on this Board as a handler representative because we did have testimony asking us to keep this during the oral testimony, I'm going to go ahead and change my vote as this came out of subcommittee and support its continued listing.

MEMBER CHAPMAN: Any further discussion? Yes, Zea.

MEMBER SONNABEND: I also thought that the written input from the manufacturer was very well-crafted and a thorough explanation which we like to see in public comment. And I think they mentioned how many customers they had or gave some indication of how much volume was going out into the organic community.

So I'm also going to change my vote to keep it on the list.

MEMBER SWAFFAR: I'm also going to change my vote. I believe we heard in the webinar -- that manufacturer was on there -- in the entire year's worth of orange juice or oranges that
they process would take them not even an hour in
their plant to make pulp. And there wasn't enough
down time to make that worth it to do an actual
organic run. And the supply wasn't there to match
what our organic stakeholders need.

It made a lot of sense. I think they
gave some really great public comment.

MEMBER CHAPMAN: I'm somewhat on the
fence on this item because I agree that there's no
question that this product is not commercially
available in organic. My problem comes with the
fact that our only source of input on this is the
manufacturer of it. And I know industry spoke up
in support.

However, I guess if you look at it that
way, if no one is using it and it remains on the
list, then what harm could it do? Nick.

MEMBER MARAVELL: It does say that the
constituent parts do seem to be available in
organic form if you wanted to create.

MEMBER CHAPMAN: In our writing,
that's what we wrote. But both the written and
public comment made it quite clear that if you summed up the entirety of the Florida orange crop, it would not even amount to a half of day's run for them to produce this product.

MEMBER MARAVELL: Thank you for that clarification.

MEMBER CHAPMAN: Yes. Jean.

CHAIR RICHARDSON: Do we have any idea why we didn't get anything from trade to let us know how much this is being used?

MEMBER CHAPMAN: The first run we also threatened to remove it which why I think we got the comment from the manufacturer. Any further discussion?

Hearing none, we'll move to a vote. This comes as a motion to remove orange pulp, dry from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: I have five yes, seven no, two abstentions. The motion fails.

MEMBER CHAPMAN: Next on the list is orange shellac. Dr. Brines.
DR. BRINES: Thank you. This substance is included at Section 205.606 of the National List under R, Orange Shellac, Unbleached, CAS number 9000-59-3. Thanks.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: Okay. Orange shellac is a purified product of the natural resin lac which is the hardened secretion of the insect Kerria lacca. It's used in the coating for fruit and vegetables as well as a confectionary glaze. A new TR was requested for this to provide updated information and to look at ancillary substances. Similar to other waxes, it is primarily used in combination with carnauba and wood rosin.

There is the same concern about labeling and consumers would be especially eager to know that their oranges are coated with beetle juice along with tree resin. But most public comment was in favor of keeping the coatings on the National List. And new information was not provided of concern about the criteria.

No ancillary substances were suggested
for the raw ingredients. But ancillaries may be used once it is formulated with the other coating agent.

MEMBER CHAPMAN: Any additional discussion on this item? Jean.

CHAIR RICHARDSON: Is the main purpose of this as with the other waxes? I mean the main purpose of this is really to make them look pretty, shiny, attract the consumer.

MEMBER SONNABEND: The main purpose in general is transpiration blocker to make them stop losing moisture as fast. And then they keep better. This one though is more shiny which is why it's used in confectionary as well.

CHAIR RICHARDSON: So this one is a little bit different than, Zea, from the other inasmuch as it's not used really just for the prevention of the transpiration. It's more as a decorative, something nice to have on it.

MEMBER SONNABEND: Well, I think it's more that --

CHAIR RICHARDSON: Is it necessary?
MEMBER SONNABEND: That depends. I mean the cloudy nature of the other two -- they differ somewhat, in that I'm forgetting the TR exactly. But they make the fruit look unnaturally dull. And so to bring it back to what it should look like, you want to put the shiny one in with it.

I don't know. Are people going to buy an orange if it looks all coated with rosin compared to nice and shiny? I do feel that to make the formulated wax products all at least two or three of the waxes are necessary.

MEMBER CHAPMAN: I also like the notes of used in confectionary glaze as well.

Any further discussions on this item?

MEMBER SONNABEND: I'll just add one point that of the commercial formulations out there far more of them are the combination of carnauba and shellac, and the wood rosin is used less frequently.

MEMBER CHAPMAN: Any other discussion on this item?
Seeing none, we'll move to a vote. It comes to us as a motion to remove this item, orange shellac, unbleached from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote is zero yes, 13 no, one abstention. The motion fails.

MEMBER CHAPMAN: Next on the list is pectin, non-amidated forms only. Dr. Brines.

DR. BRINES: Thank you. The substance is included at Section 205.606 of the National List under S, Pectin, Non-Amidated Forms Only.

MEMBER CHAPMAN: Zea.

MEMBER SONNABEND: Okay. Pectin is extracted from citrus and pommes fruit, but there is no organic source yet of extracted pectin. It's used as a gelling agent for jams, preserves, fillings and other product. It's a very desirable ingredient in organic food because it allows food to gel with less sugar than would be used without it. And the excess sugar has potential for more new negative human health effects than pectin.

It was widely supported in public
comment from users especially at the first posting. And we got some additional comment, but not a lot for this meeting. No negative comments were received with substantive information on why pectin would not meet the criteria.

Ancillary substances used in pectin include sugar and dextrose for standardizing products and trisodium citrate or other salt buffers as described in the 2015 TR. And a separate ancillary substance proposal will be considered.

MEMBER CHAPMAN: Any further discussion on this item?

Seeing none, we'll move to a vote of removing pectin, non-amidated forms only from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was zero yes, 14 no. The motion fails.

MEMBER CHAPMAN: Next on the list is peppers, chipotle chili.

DR. BRINES: Thank you. This
substance is included at Section 205.606 of the National List under T, Peppers, Chipotle Chili.

Thanks.

MEMBER CHAPMAN: Sufficient supply and should be removed. Any further discussion?

Seeing none, we'll move to a vote for removing peppers, chipotle chili, from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was 14 yes, zero no. The motion passes.

MEMBER CHAPMAN: The next item on the list is seaweed, Pacific kombu. Dr. Brines.

DR. BRINES: Thank you. This substance is included at Section 205.606 of the National List under U, Seaweed, Pacific Kombu.

Thanks.

MEMBER CHAPMAN: Thank you. Tracy.

VICE CHAIR FAVRE: This is another one of our problem children in the sea products, kombus and edible kelp belonging to the family Laminariaceae. Public comment was mixed, with
some citing the importance of the material and long history of use again, while others expressed concerns regarding the accumulation of glutants and heavy metals and potential for overharvesting.

One group suggested the Board consider an annotation requiring testing for contaminants and suggests the handling subcommittee investigate whether wild crafted organic would be available. Again, I think this is another one of those products where we need a global approach and some clarification around which family is included.

I should note that the Board was unanimous. Well, six no for removal, one absent in the subcommittee vote.

MEMBER CHAPMAN: Any further discussion of this item? Jean.

CHAIR RICHARDSON: In essence this is a duplicative listing since we've already voted on kelp, and it's in the Laminaria group.

MEMBER CHAPMAN: It has a different annotation or no annotation where the other one is annotated to specific usages. Mac.
MEMBER STONE: This says it's 90 percent cultivated or farmed. Do we know if that's organic, certified, cultivated farming and only 10 percent is not available?

VICE CHAIR FAVRE: No, I don't know that.

MEMBER CHAPMAN: Any further discussion?

Seeing none, we'll move to a vote on seaweed, Pacific kombu. The motion comes to us as a motion to remove seaweed, Pacific Kombu, from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote is one yes, 11 no, two abstentions. The motion fails.

MEMBER CHAPMAN: The next item is starches, corn starch native and sweet potato. We'll be concerned with these at the same time. Dr. Brines.

DR. BRINES: Thank you. These substances are included under 205.606 of the National List under V, Starches, as (1) corn starch
MEMBER SONNABEND: Starches are used in many foods as thickeners, formulation aids, bulking agents and moisture adsorption agents. Corn starch is generally made from special strains of corn that are high on amylose and amylopectin. Sweet potato starch is specifically used as a formulation aid for bean thread production.

There is an organic corn starch on the market, but it is not suitable for all uses. And I describe a little bit about the type of corn starches, the type of corn, which is a special strain of corn that is grown for this purpose and it has to be non-GMO because it has to be identity proved for the high amylose content. So it is not genetically engineered. I'm sure it is tested to make sure it's high enough in amylose and therefore free of GMOs.

We heard from a supplying company and a trade association that there isn't enough supply of organic moldy corn starch or the special, very
high amylose content or strains with this property.

No public comments were received concerning other criteria other than a concern over GMOs in corn starch. We have heard for this meeting a suggestion that corn starch be annotated to list those specific properties which someone may want to do in the future. Or a petition could come in for that. But it's not on my priority work plan to work on. I don't even know what moldy corn starch except it's moldy instead of molding. But I'm sure Tom knows because he knows that kind of thing.

MEMBER CHAPMAN: Any further discussion on this item? Emily.

MS. BROWN ROSEN: I believe the molding refers to they use that starch to make molds for gummy bears and other kinds of confections.

MEMBER CHAPMAN: That's correct.

MEMBER MARAVELL: I'm hoping to learn something here. Zea, why does it say corn starch and then in parentheses, native, just out of curiosity?
MEMBER CHAPMAN: I can help with that one. So there are multiple forms of corn starch. You can have a modified starch. Native is an unmodified starch.

MEMBER SONNABEND: That's right. I remember now. The modified starch has been treated with some amount of chemicals and is not acceptable in organic.

MEMBER CHAPMAN: Any further questions on this?

Seeing none, we'll move to a vote of removing starches, corn starch native, and sweet potato.

(Vote taken by show of hands)

VICE CHAIR FAVRE: The vote was two yes, 12 no. The motion fails.

MEMBER CHAPMAN: All right. The final three. Turkish bay leaves. Dr. Brines.

DR. BRINES: Thank you. The substance is included in Section 205.606 of the National List under X, Turkish bay leaves. Thanks.

MEMBER CHAPMAN: Thank you. Turkish
bay leaves, no new information since the last meeting. One comment to note, that the supply is fragile. But market data reports a fairly robust supply with multiple product origins.

I was the lead on this material and reached out to three spice companies that noted multiple countries of origin. And no supply issues with Turkish bay leaves. But they also chose not to submit public comments here.

The handling subcommittee recommended removal of this item by a vote of seven to zero.

Any further discussion? Mac.

MEMBER STONE: I just wanted to take the opportunity before we get to the very end that there were several products that graduated off of 606 here today. And I think it's a testament, too, that 606 works because certifiers and processors and growers are working to achieve. There is incentive to source and grow organic products and meet the needs of 606. Just before we got to the end, I just wanted to thank certifiers in that 606 works as messy as it is.
MEMBER CHAPMAN: Any further discussion of this item?

Seeing none, we'll move to a vote of removing Turkish bay leaves from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was 14 yes, zero no. The motion passes.

MEMBER CHAPMAN: The next is wakame seaweed. Dr. Brines.

DR. BRINES: Thank you. This substance is included at 205.606 of the National List under Y as Wakame Seaweed, Undaria pinnatifida. Thanks.

MEMBER CHAPMAN: Thank you. Tracy.

VICE CHAIR FAVRE: Okay. The final of our problem children, wakame edible seaweed. Most often served in soups and salads. Native to cold, temperate coastal regions, but has recently -- Coastal regions of Japan, Korea and China -- but has recently expanded to New Zealand, the United States, France, Great Britain, Italy, Spain, Argentina and Australia.
Just as a note of trivial it was nominated as one of the ten worst invasive species in the world. So I don't think we have an overexploitation problem.

It was actually petitioned back in 2007. The petitioner stated that while other organic seaweeds were available they did not provide the same flavor profile and could not be used in incident for which it was being petitioned as an ingredient. Hence, a new variety.

Public comment did suggest concerns over overharvesting and ecosystem degradation. One commenter did object to continued listing of wakame citing that all nonorganic agricultural ingredients should be eliminated from the National List. One group did suggest the Board consider an annotation requiring testing for contaminants and suggests that the handling subcommittee investigate whether wild crafted, organic would be available.

The motion to retain was six to retain on the list and one absent.
MEMBER CHAPMAN: Any additional discussion on this item?

Seeing none, we'll move to a vote of removing wakame seaweed from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was one yes, 12 no, one abstention. The motion fails.

MEMBER CHAPMAN: The last item is whey protein concentrate. Dr. Brines.

DR. BRINES: Thank you. This last item is on Section 205.606 at Z, Whey Protein Concentrate. Thanks.

MEMBER CHAPMAN: Thank you. Really simple on this one again. Sufficient supply of this item should be removed from the National List. Any further discussion?

Seeing none, we move to a vote on removing whey protein concentrate from the National List.

(Vote taken by show of hands)

VICE CHAIR FAVRE: That was 14 yes, zero no. The motion passes.
MEMBER CHAPMAN: That concludes 2017 sunset review for handling materials. I'm going to climb under the table and turn the chair back over to Jean.

(Applause)

CHAIR RICHARDSON: All right. Just one more day tomorrow. We'll meet back here at 8:30 tomorrow morning. Board Members, we are meeting downstairs in the main lobby at 6:30 p.m. Oh, 6:40 p.m. See you tomorrow at 8:30 a.m., everybody. Off the record.

(Whereupon, the above-entitled matter went off the record at 6:17 p.m.)
The Board met in the Pinnacle Room of the Stoweflake Conference Center, Stowe, Vermont, at 8:30 a.m., Jean Richardson, Chair, presiding.

PRESENT

JEAN RICHARDSON, Chair
TRACY FAVRE, Vice Chair
HAROLD AUSTIN, Secretary (via Skype)
CARMELA BECK
COLEHOUR J. BONDERA
TOM CHAPMAN
LISA DE LIMA
NICK MARAVELL
ZEA SONNABEND
ROBERT "MAC" STONE
ASHLEY SWAFFAR
JENNIFER TAYLOR, PhD
FRANCIS THICKE, PhD
C. REUBEN WALKER, PhD
ALSO PRESENT

MICHELLE ARSENAULT, Advisory Board Specialist, National Organic Program

LISA BRINES, National List Manager, National Organic Program

EMILY BROWN ROSEN, Agricultural Marketing Specialist, National Organic Program

PAUL LEWIS, Director, Standards Division, National Organic Program, USDA

SAM JONES, AMS Public Affairs Specialist

MILES MEVOY, Designated Federal Officer, Deputy Administrator, National Organic Program
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Adjourn
CHAIR RICHARDSON: Good morning everybody. Good morning, and it's positively hot out there this morning. I think it's like 54 degrees Fahrenheit, above normal temperature for this time of year.

Okay, so this morning, we're going to go into livestock, and they don't have as many materials as the other two committees, and there's not much up for removal, so I would imagine it'll go quite quickly. And so at this time, I will note for the record that Harold Austin is present from his desk out there on the West Coast in the late --- well, middle of the night basically, and I will turn over the meeting at this point to the Chair of the Livestock Committee, Tracy Favre.

VICE CHAIR FAVRE: Good morning, thank you. We'll just go ahead and jump right in. Our first material this morning is alcohols ethanol, which happens to be mine. Dr. Brines?

DR. BRINES: Thank you. This
substance is included at Section 205.603(a) of the National List as disinfectants, sanitizer and medical treatments as applicable under 1(I), ethanol disinfectant in sanitizer only, prohibited as a feed additive.

VICE CHAIR FAVRE: Okay, thank you.

Public feedback for this material was generally in favor of continued listing. The most common uses were for disinfection of the teat prior to --- and prior to testing for bacteria and for general disinfection. Those that expressed concerns for re-listing cited concerns regarding the possibility of GMO sources and questioned whether sufficient research had been done on alternatives.

Do we have any discussions on this material? Seeing none, all those in favor of removal of ethanol from the National List signify by raising your hand. Okay, that’s all right. You want --- you had a question, Jennifer?

MEMBER TAYLOR: If the Committee is going to address any of those issues that were
brought up about the GMO ---

VICE CHAIR FAVRE: Well that had come up in public comment, and we had not --- I mean we did do the review in committee, but we did not discuss it and at this time, probably won't be bringing it back to committee for that.

MEMBER TAYLOR: Thank you.

VICE CHAIR FAVRE: Are we ready to vote? Okay, all those in favor of removal of ethanol from the National List please signify by raising your hand. Those opposed to delisting? Okay. Abstentions? Okay. Tom?

MEMBER CHAPMAN: One yes, 12 no, one abstention. The motion fails.

VICE CHAIR FAVRE: Okay next up on our list is isopropanol. Dr. Brine?

DR. BRINES: Thank you. The substance is included in Section 205.603(a) of the National List as disinfectant, sanitizer and medical treatments as applicable under 1(ii), isopropanol disinfectant only.

VICE CHAIR FAVRE: Calvin?
MEMBER WALKER: Thank you Madam Chair. I'll follow suit the way you just did, be very brief. Isopropanol is used as a disinfectant only. In 2010 the full Board voted to renew this material. The Subcommittee as well voted 6-0 with two abstentions to renew this material, and we had a very broad support in the first comment period, and the second comment period, for relisting this particular material. And some of the entities in support were CCOF Crop, IOIA, OPWC, AOD, WODA and Dr. Hugh Karreman.

VICE CHAIR FAVRE: Discussion?

MEMBER THICKE: Just a clarification that we voted to relist it, not remove it in full. It's confusing because nowadays yes is the new no.

VICE CHAIR FAVRE: Yes, that's true. Thank you.

Any discussion? Okay seeing none, all those in favor of removal of isopropanol please raise your hand. Those opposed to removal? Abstentions? Okay. Tom?

MEMBER CHAPMAN: One yes, 12 no, one
absent. The motion fails.

VICE CHAIR FAVRE: Okay next up on our list is aspirin. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (a)(2), aspirin approved for healthcare use to reduce inflammation. Thanks.

VICE CHAIR FAVRE: Jean?

CHAIR RICHARDSON: Thank you. There was the broad support expressed for keeping aspirin on the National List, and this also reflects the vote in Subcommittee. There was unanimous support for keeping aspirin on the list, and no comment indicates otherwise. Thank you.


MEMBER CHAPMAN: Zero yes, 13 no, one absent, motion fails.

VICE CHAIR FAVRE: Okay, moving right
along. Next up is atropine. Dr. Brines?

DR. BRINES: Thank you. Atropine is included at the National List at Section 205.603(a)(3) as atropine CAS number 51-55-8.

Federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian in full compliance with the AMDUCA and 21 CFR Part 530 of the Food and Drug Administration regulations. Also for use under 7 CFR Part 205, the NOP requires (1) use by or on the lawful written order of a licensed veterinarian, and (2) a meat withdrawal period of at least 56 days after administering to livestock intended for slaughter and a milk discard period of at least 12 days after administering to dairy animals. Thanks.

VICE CHAIR FAVRE: Thank you, you're going to get your workout in livestock today. Jean?

CHAIR RICHARDSON: Thank you. Yes, atropine is rarely used. It is a highly controlled administered by a veterinarian only, given as an
antidote for organophosphate poisoning as an anti-spasmodic. We received broad support to keep this on the list, and that is also reflected in the vote of the Subcommittee, unanimous vote by the Subcommittee to keep this on the National List.


MEMBER CHAPMAN: Zero yes, 14 no. Motion fails.

VICE CHAIR FAVRE: Next up is biologics vaccines. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 (a) of the National List as (4) biologics vaccines. Thanks.

VICE CHAIR FAVRE: Jean?

CHAIR RICHARDSON: Biologics vaccines, there is broad support for keeping biologics vaccines on the National List, and this is reflected in the vote of the Subcommittee, a unanimous vote to keep them on the list.

MEMBER CHAPMAN: Zero yes, 14 no. The motion fails.

VICE CHAIR FAVRE: So clearly the key to moving through Committee votes quickly is to do it first thing in the morning. Next up is butorphanol. Dr. Brines?

DR. BRINES: Thank you. This substance is included under Section 205.603(a) of the National List under (a)(5), butorphanol, CAS number 42408-82-2.

Federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian in full compliance with the AMDUCA and 21 CFR Part 530 of the Food and Drug Administration regulations. Also for use under 7 CFR Part 205, the NOP requires (1) use by or on the lawful written order of a licensed veterinarian, and (2) a meat withdrawal period of at least 42 days.
after administering to livestock intended for
slaughter and a milk discard period of at least
eight days after administering to dairy animals.
Thanks.

VICE CHAIR FAVRE: Thank you. Jean?
Oh, excuse me. Colehour?

MEMBER BONDERA: Thank you. So yes,
butorphanol is used for preoperative pain control
in animals. We did not have very much public
comment. The Subcommittee was all for relisting.

I do want to share that I think that some
time was spent with the concerns regarding
interpretations or --- interpretations is the
wrong word, where or how the law and the wording
allows for the use, because it's an extra label use,
it's not permitted if you read the label, and that
is --- you've got to dig through a lot of papers
and history. I think -- thanks to Emily Brown
Rosen, we were able to identify and find those
references, but I think it's frankly was cumbersome
and very bureaucratic and not at all easily
accessible in our discussions or conversations as
to what we were referring to or how it was permitted.

You know, it's an off label or extra label use, it's only permitted in the context of valid veterinarian client-patient relationship, including with limited treatments, and the health of the animal has to be threatened or suffering or death might result from the failure to treat. So I think that this all seems a little bit trivial or a side issue, but I think from my experience going through this process, frankly it was, like I already said, it wasn't that simple to be --- at least for me, as the lead person, able to grab my hands on it and say this is why and how that we can point to in legal reference. So like I already said, that was where it was at, and the Subcommittee all was behind it. Thank you.

VICE CHAIR FAVRE: Before we move on to discussion, I'm going to ask Emily Brown Rosen to provide just a little bit of description of that so not only for those of us that are not in the Committee, but into the record we have some
understanding of how that works.

    MS. BROWN ROSEN: Right, well this a renewal of an item that was put on the list in 2007, I believe, was the first proposed rule on all these livestock medications, and NOP did consult with FDA at that time, and we double-checked this time too, because it's confusing to the public that it's not on the label or if you go on the website for the products, they're not labeled for livestock.

    But it's just --- you know, not all animal drugs are registered for every species, but there is a provision called AMDUCA which veterinarians -- if it has a registration for one drug, under the veterinary discretion it can be used on other animals. So we did reconfirm that butorphanol is approved for livestock use.

    VICE CHAIR FAVRE: Thank you for helping us understand that. Any discussion on butorphanol? Mac?

    MEMBER STONE: I have a generic question. Is this twice the withdrawal time for a couple of these materials that go back to '95 the
early days, or --- I'm just curious how that ---
I like it and I'm glad, I'm just curious where it
came from.

MS. BROWN ROSEN: This --- these were
--- since this drug does not have a withdrawal time
on the label I don't believe, it's twice the
withdrawal time --- at the time that this was
proposed by NOSB, they proposed to go by the FARAD,
the Food Animal Residue Avoidance Database, which
is the reference that the veterinarians used for
these drugs that are on the extra label use, so it's
twice the withdrawal for that.

VICE CHAIR FAVRE: Any other
discussion? Okay, all those in favor of the motion
to remove butorphanol from the National List, raise
your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: Zero yes, 14 no. The
motion fails.

VICE CHAIR FAVRE: Thank you. Next up
is chlorhexidine. Dr. Brines?

DR. BRINES: Thank you. This
substance is included at Section 205.603(a) of the
National List under (a)(6), chlorhexidine allowed for surgical procedures conducted by a veterinarian, allowed for use as a teat dip when alternative germicidal agents and/or physical barriers have lost their effectiveness. Thanks.

VICE CHAIR FAVRE: Thank you. Francis?

MEMBER THICKE: Thank you. We received quite a few comments on the need to keep chlorhexidine on the list, as well as --- well, I should maybe mention first, it was briefly mentioned, it's used as a sanitizer for veterinarians for material -- for equipment, as well as it can be used for a teat dip when other teat dips have failed. And so there were comments to keep it on for that use.

But there were also some concerns about the environmental effects of manufacturing chlorhexidine as well as the health effects from exposure to using it. So it should remain as the teat dip of last resort as was suggested, and which is the case anyway. And so it was moved --- it was
supported 6-0 to keep it on the list. 5-0, I'm sorry. No, I had the wrong --- I had my pages mixed up here. 6-0, okay. All right. Got you. In any case, it was unanimous.

VICE CHAIR FAVRE: Any discussion on chlorhexidine? Okay. Seeing none, all those in favor of removal of chlorhexidine from the National List, please raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: One yes, 13 no. The motion fails.

VICE CHAIR FAVRE: Okay, chlorine materials. Dr. Brines?

DR. BRINES: Thank you. We'll take up all of the chlorine materials as a group as listed at Section 205.603(a) under (a)(7), chlorine materials, disinfecting and sanitizing facilities and equipment. Residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act, (1) calcium hypochlorite, (2) chlorine dioxide, and (3) sodium hypochlorite. Thanks.
VICE CHAIR FAVRE: Ashley?

MEMBER SWAFFAR: Chlorine has many uses as a sanitizer. The majority of public comment was in support of the relisting of chlorine stating it was essential and alternatives were not effective. And I will point out that there are industry-specific applications that require chlorine materials as mandated by federal law.

One commenter did state that we should request a limited scope TR to discover what is required by federal law, and as Francis said in Crops and I said in Handling, we may look at this across all committees to determine if we want to do a combined TR, and the Subcommittee unanimously felt that chlorine should be relisted.

VICE CHAIR FAVRE: Okay, discussion?

Colehour?

MEMBER BONDERA: Yes, I just want to put on the record that I will be changing my vote and doing a protest vote in regard to this, knowing that it will not be influencing the outcome, but instead because I, again, cannot clearly see how all of
these ifs ands and buts in terms of, we could, we
should, we might look at the legal requirements and
incorporate them into the process and/or seriously
and honestly review the alternatives, will be
happening and this won't just be another sunset item
that remains on because that's the way it was.

So I just think the changes are being
bumped to the hypothetical future, and I don't see
a mechanism in place that will ensure that, so thank
you.

VICE CHAIR FAVRE: Thanks for your
comments. Anybody else? Okay, seeing no further
discussion, those in favor of removal of chlorine
materials --- Dr. Brines?

DR. BRINES: Yes, just I guess one
comment on process. Thank you, Colehour, for your
comments in terms of the evaluation of the material.
It may be preferable to abstain from the vote rather
than cast a vote which is not aligned with the OFPA
criteria, which are the criteria that the Board
should be using to evaluate substances against the
National List. Thank you.
VICE CHAIR FAVRE: Colehour?

MEMBER BONDERA: Thank you, Lisa. I actually considered that and appreciate your input. However, I think that my recommendation is to send this back to Subcommittee, and that has been declared as not an option, and so I feel like you're right about the process, but just because I'm forced to vote does not mean that I should abstain, which means I don't have enough information.

If I have to vote at this moment, which like I've already stated, I do not think should be the way it's managed, then I think I will use my voting power to make a statement versus abstention, which like I said is insufficient information, because I do feel like we all have insufficient information, and I will predict that there's going to be very few or zero abstentions on this. So thank you.

VICE CHAIR FAVRE: Any other discussion? Seeing none, those in favor of removal of chlorine materials from the National List, please raise your hand. Those opposed?
MEMBER CHAPMAN: Two yes, 12 no. The motion fails.

VICE CHAIR FAVRE: Okay, next up, electrolytes. Dr. Brines?

DR. BRINES: Thank you. The substance is included under Section 205.603(a) of the National List under (a)(8), electrolytes without antibiotics. Thanks.

VICE CHAIR FAVRE: Calvin?

MEMBER WALKER: Electrolytes, used as an animal welfare issue to me and the Subcommittee. When animals are dehydrated, we want to make sure that they return to health as soon as possible. In 2010, the full Board voted 14-0 with one absent to retain this material, and the second comment period, Beyond Pesticide, Aurora Dairy, OTA, IOIA, CCOF recommended relisting this material, and MOSA in their survey showed that there was over 50 plus producers using this material.

VICE CHAIR FAVRE: Okay, any discussion on electrolytes? Seeing none, those in favor of
removal of electrolytes from the National List, please raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: Zero yes, 14 no. The motion fails.

VICE CHAIR FAVRE: Thank you. Next up is flunixin. Dr. Brines?

DR. BRINES: Thank you. The substance is included under Section 205.603 of the National List under (a)(9), flunixin, CAS number 38677-85-9 in accordance with approved labeling, except that for use under 7 CFR Part 205, the NOP requires a withdrawal period of at least two times that required by FDA. Thanks.

VICE CHAIR FAVRE: Okay. Ashley?

MEMBER SWAFFAR: So flunixin is used for reducing pain and fever. Several commenters wrote in support of the relisting and the Subcommittee unanimously felt flunixin should be relisted.

VICE CHAIR FAVRE: Any discussion on flunixin? Mac?
MEMBER STONE: Maybe this is --- can be answered later when we leave, but it says, the flunixin's counterclockwise spin of light absorption. I'm really curious about what that means.

MEMBER SWAFFAR: That was from the TR.

MEMBER MARAVELL: That was put in to see if you were still awake.

VICE CHAIR FAVRE: Any other discussion? Seeing none, those in favor of removal of flunixin, raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: One yes, 12 no, one abstention. The motion fails.

VICE CHAIR FAVRE: Okay, next up, furosemide. Dr. Brines?

DR. BRINES: Thank you. This substance is included under 205.603 of the National List under (a)(10), furosemide, CAS number 54-31-9. In accordance with approved labeling except for use under 7 CFR Part 205, the NOP requires a withdrawal period of at least two times that required by the
FDA. Thanks.

VICE CHAIR FAVRE: Ashley?

MEMBER SWAFFAR: Furosemide is a diuretic and used for treatment of edema and hypertension. There were some comments this time that stated they were in support of the relisting. A lot of those were checklist type comments, but I will say the original petitioner did comment in the spring that this could be sunnsetted and there are natural compounds that could be used in its place such as coffee. The Subcommittee did feel that furosemide could be delisted at this time.

VICE CHAIR FAVRE: Any discussion? Francis?

MEMBER THICKE: I'd just say as a dairy farmer, I've never heard of anybody using this material. Well maybe, you know, I live in a little limited world, but it's basically for cows that have a calf and they have udder edema, swollen udder, and what we tend to use is warm water massage and peppermint oil and milking the cow completely so if --- I don't think --- I don't know if people are...
using it. The comments seem to reflect that.

VICE CHAIR FAVRE: Any further discussion? I'll just add that in committee, I actually voted against removal of this material, but after seeing the comments and hearing from someone who could potentially be using it, I'm going to change my vote to delist.


MEMBER CHAPMAN: 14 yes, zero no. The motion passes.

VICE CHAIR FAVRE: Okay, next up is glucose. Dr. Brines?

DR. BRINES: Thank you. This substance is included under Section 205.603 of the National List under (a)(11), glucose. Thanks.

VICE CHAIR FAVRE: Calvin?

MEMBER WALKER: This is another material I happened to pick that was brought up support. The previous Board, 2010, no one objected
to relisting this material. The Subcommittee voted unanimously to keep this material. Public support, the first round and the second round included the same host of entities such as Beyond Pesticides, CCOF, MOSA. MOSA has shown in their survey there was 10 producers using this material, and IOIA also supported the relisting.

VICE CHAIR FAVRE: Thank you, Calvin. Any discussion? Seeing none, those in favor of removal of glucose from the National List, please raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: Calvin, I didn't see your vote.

MEMBER WALKER: Keep it on the list.

MEMBER CHAPMAN: Zero yes, 14 no. The motion fails.

VICE CHAIR FAVRE: Okay next up is glycerin. Dr. Brines?

DR. BRINES: Thank you. This substance is included under 205.603 of the National List, under (a)(12), glycerin, allowed as a livestock teat dip; must be produced through the
hydrolysis of fats or oils. Thanks.

VICE CHAIR FAVRE: Okay, that's mine.

Glycerin, wide variety of uses. For livestock, it's primarily seen as a component in a teat dip, particularly one commenter remarked that it's particularly good for cold weather. Public comment was heavily in favor of continued listing of this material, as glycerin is the main component of many teat dips and provides unique emollient properties which prevents chapping and damage to udders. Because of the complexity surrounding the classification of glycerin due to multiple manufacturing processes, one group did urge the Materials Subcommittee to take up the issue of classification of materials made by fermentation. The vote in Subcommittee was 5 to retain it on the list, one abstention. Any discussion on glycerin?

MEMBER CHAPMAN: Was there any discussion to require an agricultural form that's now a requirement under handling?

VICE CHAIR FAVRE: No.
MEMBER CHAPMAN: Or proposed under handling?

VICE CHAIR FAVRE: No, there wasn't that discussion. Any other conversation? Okay, those in favor of removal of glycerin from the National List, please raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: Zero yes, 14 no. The motion fails.

VICE CHAIR FAVRE: Okay. Next up, hydrogen peroxide. Dr. Brines?

DR. BRINES: Thank you. The substance is included under Section 205.603 of the National List under (a) (13), hydrogen peroxide. Thanks.

VICE CHAIR FAVRE: Okay. Calvin?

MEMBER WALKER: This is one of the materials that have a very, very high support among all stakeholder groups. Hydrogen peroxide is used as a cleaning agent on contact surfaces such as equipment, calf pails, bottles, utensils. In 2010, no one objected to relisting this material, and this time the same group, Cornucopia, Beyond
Pesticides, Aurora, Organic Dairy, Bio Safety Systems, IOIA, and MOSA, and their survey showed that over 40 producers were using this material. And CCOF also stated support of this material.

VICE CHAIR FAVRE: Any discussion on hydrogen peroxide? Okay, seeing none, those in favor of removal of hydrogen peroxide, please raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: Zea I didn't get your vote. Zero yes, 14 no, the motion fails.

VICE CHAIR FAVRE: Okay, next up is iodine. Dr. Brines?

DR. BRINES: Thank you. There are two listings for iodine on the livestock section of the National List, so they'll be considered by the Board as a group. The first listing is included at Section 205.603 of the National List under (a)(14), iodine. The second listing is under Section 205.603 of the National List under (b) as topical treatment, external parasiticide or local anesthetic as applicable. Three, iodine. Thank you.
VICE CHAIR FAVRE: Jean?

CHAIR RICHARDSON: Thank you. We had a great deal of discussion on iodine in the Subcommittee over a long period of time, not because of the iodine itself, which is strongly supported widely across all of the community of all stakeholders, but because of the manner in which the iodine itself is complexed into a variety of iodophors where the surfactants are mixed with molecular iodine to enhance water solubility and sequester the molecular iodine for extended release in the disinfectant product.

So in other words, they add something to make it stick a bit and last longer, and one of the materials which is used to do this is in this large group which is generally referred to in the lay literature as just NPEs, and there was considerable discussion as to whether or not we should be working to develop a separate annotation that would limit the use of iodine in a teat dip form to formulations that had no NPEs.

We nonetheless --- and we may well come
back to you in April with a separate proposed annotation that iodine should not be used -- only without the NPE and broader groups of some of these excipients. That does of course raise issues for all the other excipients, so it's not going to be as simple as we might like it to be, but nonetheless, aside from that one potentially very serious issue, for which we received quite a bit of public comment, the Subcommittee strongly supports the continued use of iodine in both the listings at 603 (a) and 603 (b), and it was unanimously supported to keep it on the National List.

VICE CHAIR FAVRE: Discussion? Not going to touch that one, huh? Okay, those in favor of removal of iodine from the National List, please raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: Zero yes, 14 no. The motion fails.

VICE CHAIR FAVRE: Okay. Next up, magnesium hydroxide. Dr. Brines?

DR. BRINES: Thank you. This substance is included under Section 205.603 of the
National List under (a)(15), magnesium hydroxide, CAS number 1309-42-8. Federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian in full compliance with the AMDUCA and 21 CFR Part 530 of the Food and Drug Administration regulations. Also for use under 7 CFR Part 205, the NOP requires use by or on the lawful written order of a licensed veterinarian. Thank you.

VICE CHAIR FAVRE: Okay. Ashley?

MEMBER SWAFFAR: Magnesium hydroxide is primarily used as an antacid. There were lots of comments that wrote in -- commenters that wrote in for support of the relisting, stating that it helps with grass tetany and bowel function problems. There were no comments received that wanted magnesium hydroxide delisted, and the Subcommittee felt that this should be relisted.

VICE CHAIR FAVRE: Okay, any discussion? Seeing none, those in favor of removal of magnesium hydroxide, please raise your hand. Those opposed? Abstentions?
MEMBER CHAPMAN: Zero yes, 14 no. The motion fails.

VICE CHAIR FAVRE: Okay, magnesium sulfate is our next material. Dr. Brines?

DR. BRINES: Thank you. This substance is included under Section 205.603 of the National List under (a)(16), magnesium sulfate. Thanks.

VICE CHAIR FAVRE: Ashley?

MEMBER SWAFFAR: Magnesium sulfate is used to treat conditions stemming from a magnesium deficiency or as Epsom salts to treat inflammation and abscesses in livestock by soaking the affected area. There was broad support from commenters to relist this material, and the Subcommittee felt this material should be relisted.

VICE CHAIR FAVRE: Okay, any discussion on magnesium sulfate? Seeing none, those in favor of removal of magnesium sulfate, please raise your hand. Those opposed? Okay, we need a clarification. Jennifer, how do you vote? Okay, Jennifer votes to remove. Okay, abstentions?
Okay.

MEMBER CHAPMAN: One yes, 13 no, the motion fails.

VICE CHAIR FAVRE: Next up is oxytocin. Dr. Brines?

DR. BRINES: Thank you. This substance is included under Section 205.603 of the National List under (a)(17), oxytocin, use in post-parturition therapeutic applications. Thanks.

VICE CHAIR FAVRE: Calvin?

MEMBER WALKER: Yes, another material with broad support. None of the stakeholders' groups opposed relisting. It is used in uterine contraction when animals are birthing, the female at least, and there's some difficulties with the little one coming through the birth canal. So this is important material. Beyond Pesticide, Aurora Dairy, IOIA, CCOF, and MOSA show that some of their producers were using this material.

VICE CHAIR FAVRE: Okay, any discussion on oxytocin? Seeing none, those in favor of
removal of oxytocin from the National List, please raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: Zero yes, 14 no. The motion fails.

VICE CHAIR FAVRE: Okay, next up are the parasiticides, and we're actually going to read the listing all as one, but we will be voting on them separately. Dr. Brines?

DR. BRINES: Thank you. These substances are included under Section 205.603 of the National List under (a)(18), parasiticides prohibited in slaughter stock, allowed in emergency treatment for dairy and breeder stock when organic system plan approved preventative management does not prevent infestation.

Milk or milk products from a treated animal cannot be labeled as provided for in subpart (d) of this part for 90 days following treatment. In breeder stock, treatment cannot occur during the last third of gestation if the progeny will be sold as organic. It must not be used during the lactation period for breeding stock.
One, fenbendazole, CAS number 43210-67-9, only for use by or on the lawful written order of a licensed veterinarian.  Two, ivermectin, CAS number 70288-86-7 and (3) moxidectin, CAS number 11350-06-5 for control of internal parasites only. Thank you.

VICE CHAIR FAVRE: Thank you, Dr. Brines. Francis?

MEMBER THICKE: So the parasiticides have a long and convoluted history here, and I'm not going to cover it all, but just briefly, that ivermectin was the first one that was approved by NOSB in 1999. Moxidectin was second in 2004, although it took a while for it to actually get on the list, and fenbendazole in 2008.

And just from the technical review, some points --- highlights. Fenbendazole is actually the last one on the list, is considered to be the most benign environmentally as far as the residual effects to the environment in the manure and also for milk withdrawal.

Ivermectin is the one that was first
voted on, and that one is considered to be the most
harsh environmentally. The biggest concern has to
do with killing dung beetles and other
soil-dwelling animals you might say. Moxidectin
is not supposed to be so bad for those dung beetles,
but it's not good for aquatic life. But if you look
at a well-managed pasture, which you should have on
an organic farm, the soil is the thing where it gets
to, and the manure should not get to the water.

So overall, what the committee did is we
voted to remove ivermectin, and we had a mixed vote
for moxidectin, and I'm going to mention that my own
vote was against moxidectin, just to get comments,
because we weren't certain about the use pattern,
okay, we got a lot of good comments. And we were
unanimously in favor of keeping fenbendazole.

And the comments we got were all over the
board, but a lot of people said they need all three
of them. We had though a lot of targeted comments
that said --- I think well thought out and
well-argued comments, that said that ivermectin and
moxidectin have similar modes of action, and so we
really only need one of those, and if we have moxidectin and fenbendazole on the list, that we have two modes of action, and so we have a backup in case of resistance.

And I think that the committee was thinking along those lines, and I certainly am now after hearing the comments. I did not see any really good argument for keeping both ivermectin and moxidectin. We did get comments that we need both, but I looked closely to see why we need both, and nobody really made the case why we need both that I could see, unless I missed it. So on the overview, my recommendation is that we keep fenbendazole on the list, and we keep moxidectin on the list, and we remove ivermectin.

VICE CHAIR FAVRE: Thank you, Francis. Discussion? Zea?

MEMBER SONNABEND: I have a question, and I'm not maybe as up on this subject as I should be, but I was there for when ivermectin was put on the list, and I seem to recall a lot of concern, especially from sheep producers, that the other
substances didn't work as well, and so I'm wondering if you heard from sheep producers particularly regarding their parasites and whether they needed that as a choice.

MEMBER THICKE: Well, we've heard that there's some difficulties with, again, like what it's recommended to be used for and what it can be used for, and there's problems with fenbendazole, as it has to be --- by the rule, it has to be recommended by a veterinarian, the other two do not. And so all those come into play. And moxidectin is only allowed on the list for internal parasites and not external parasites, and it's ironic because it's a pour on, and so if you pour it on, you're going to control the external parasites.

So what I'm getting is that moxidectin does fill that need for sheep and goats if it's used --- and we're going to consider later a proposal to change those annotations so that moxidectin can be for both internal and external parasites. So what I've seen is that with moxidectin and fenbendazole, that we have coverage for small animals as well.
MEMBER SONNABEND: Follow up question to that?

VICE CHAIR FAVRE: Go ahead.

MEMBER SONNABEND: So there was a sentence in here, and I've lost it now, but something about we may allow sheep wool to be sold after administering these?

MEMBER THICKE: That is going to be --

MEMBER SONNABEND: Could you explain that?

MEMBER THICKE: That is going to be considered in the proposal later. Now, sheep that are treated cannot --- the wool cannot be used as organic, but that will be addressed in the proposal later on, and we can talk about that then.

MEMBER SONNABEND: Thank you.

VICE CHAIR FAVRE: Okay, Jean first, and then Mac.

CHAIR RICHARDSON: Thank you. This isn't easy, and one of the reasons why it's not easy is that there's a certain little bit of confusion in the way the materials are sort of listed, and I'll
be discussing later on in the presentation of the discussion document on some proposed change annotations for these three materials in regards to the withholding period of time, and also the fact that at the present time, moxidectin is listed for control of internal parasites only, and it will be certainly our recommendation in the proposal coming back in the spring that it would be used both internal and external, and we would also be recommending a shortening of the withholding period of time which was established for ivermectin, which has a much longer withholding period than is necessary for either fenbendazole or moxidectin. And I shall be voting to keep both fenbendazole and moxidectin, and as I say, we've discussed these at incredible length on the Subcommittee.

I am challenged to know what to do with ivermectin, and one of the reasons is is that looking at all the public comment that's come from across the country is that in the West especially, and especially amongst sheep producers, ivermectin is the one material that is commonly used. They
don't use the fenbendazole typically, and I think it's really related to the fact that you were -- in order to use the fenbendazole, you're going to be working with a veterinarian, and you're only using the ivermectin when you've got an emergency situation so heck, it's much easier to go to the store and get the ivermectin than wait for the vet to come. And I actually remember when I raised sheep here in Vermont, it was much more sensible for us to have the ivermectin on hand than to go out working through the veterinarian.

So the bottom line is that we're only using the --- you've got to have good farm grassland management and pasture rotation and count of -- fecal counts and be looking for sheep breeds, for example, not so serious for cattle breeds, but for breeds of animals which are much more parasite resistant, and, you know, that's sort of the foundation.

And you're only going to be using these in any case for an emergency. So assuming you're only using it in extremely rare cases, you're not
going to be using very much ivermectin, so perhaps on organic farms, the dung beetles are not being as negatively impacted as they would be on a conventional farm. And we certainly did see slides that Kent Henderson showed us, I think that was on the webinar where there was a buffalo herd, and all the dung was sitting there on the ground in large piles to show us, you know, he was trying to demonstrate the extent to which you could get an excessive amount of dung accumulating. Great pictures, and everyone loves dung beetles of course.

But on most farms, it's going to be used extremely rarely, so we fare in suggesting that we take ivermectin off the list when we know it's only going to be used in an emergency, and we know that it is the most common material that's used out west for sheep farms, and we know that our competition coming from New Zealand and Australia will have been treated with ivermectin.

And this is before I answer, I think Zea's concern for the fact that it would be nice to
be able to use the sheep wool, whether the animal has had ivermectin or not. So we certainly need to take this extremely seriously. I think the fenbendazole, which came along much later, could be well used in the West, it just typically isn't, and a veterinarian thing, I think, is the catch. In the East, especially in the Northeast, it tends to be somewhat more used than it is in other areas, and I noticed from the public comment that there was definitely an East/West difference in the way in which ivermectin was --- the kind of public comment we got on ivermectin as opposed to the other materials.

So perhaps --- and I'm just throwing this out, because here's Jean has been pushing to get rid of the ivermectin, because we don't really need three of them I don't think, but we don't know if the annotations are going to go through. The annotations would include probably not having a veterinarian used for --- and that's part of the discussion document, not this discussion really, but I think that the annotation, based on public
comment, will be suggesting that we not have a veterinarian have to be involved for the use of fenbendazole, and so therefore the fenbendazole would be more easily available to farmers that want to use it, whether you're dairy or sheep or goats.

And there has been an issue raised by some of the commenters that the --- about the --- let's see, it's haemonchus contortus I think, I don't have my notes right in front of me. One of the happy little elements that we don't want, a suggestion that moxidectin doesn't get to it. But in actual fact, if you look at the technical report, haemonchus contortus is impacted and killed by fenbendazole, so there's a little bit of confusion amongst the farmers as to what the three different parasiticides can do.

And I noticed that also in comments from certifiers and from farmers differentially between the East and the West, and certainly there's a big difference between sheep farmer comments and dairy farmer comments, because the issue of parasites is far greater for sheep farmers than for others. So
I'd be interested to know what the rest of the committee feels about the ivermectin especially, if we eliminate it before we've made the possible annotation changes at the spring meeting.

VICE CHAIR FAVRE: Mac?

MEMBER STONE: Thanks, Jean. That gets to some of my questions here. So I feel like I'll know better what to do today --- I feel like I need to move them all forward without knowing a little more about the potential annotation change. So if it's not too confusing, maybe let's discuss the potential annotation discussion with each of these as we go through, because as a sheep farmer, you know, you can have an outbreak pretty quick, and I'd like to have access to something that is on the store shelf and I don't have to call the vet, and some of that kind of stuff. So is it possible that we could sort of look at --- I like the annotation recommendations, but I'm still --- they're sort of jumbled together at this point in my mind.

VICE CHAIR FAVRE: Francis?

MEMBER THICKE: I wonder if we should
hold the vote until after the discussion on the annotation changes. We can't do that?

CHAIR RICHARDSON: We're not --- we don't have a proposal today, we only have a discussion document.

MEMBER THICKE: Right.

CHAIR RICHARDSON: There won't be a proposal until the Spring. We have to complete sunset before we can ---

MEMBER THICKE: Well what I'm saying, before we discuss the --- if we could have a discussion on the discussion document before we have this vote, because it would clear up some of these questions that Mac has. I have another comment, too, I'm only thinking of it.

CHAIR RICHARDSON: Well, I think a lot of what I've just been saying is really sort of the central part of what's in the discussion document.

MEMBER THICKE: Right, we should really sum up. The key points are that moxidectin would be allowed for both internal and external parasites, and we'd take away the long --- proposing
to take away the long withdrawal period of 90 days, but we probably couldn't do that with ivermectin, we could do that with moxidectin and fenbendazole. And we're suggesting taking away the veterinarian requirement for the veterinarians to prescribe it.

And I want to make one more comment about the use of ivermectin in some cases, and I think that it's often out of habit, and often out of tradition. This is what's been on the list and this is what they've been using. We heard a dairy farmer speak earlier and he said, well I went down to TSC and that's what was there and I just got it. And I actually got it -- went to TSC in my -- Tractor Supply Company in my town, and moxidectin was right next to agrimectin. And so it's there, it just -- we're just used to grabbing one thing I think, and that shouldn't limit us.

VICE CHAIR FAVRE: Jean?

CHAIR RICHARDSON: Yes, I just want to be clear. Mac, is the ivermectin needs the lengthy withholding, so that --- and I can't tell you off the top of my head what the proposal would look like
for the spring, but the withholding however for
fenbendazole will be drastically shorter because
the withholding as it is right now of the 90 days
et cetera, that was really established for
ivermectin, and then it was just picked up by the
other two, so to speak, without really looking at
the FARAD and analyzing whether you needed that
length of time.

So from a farmer point of view, the
withholding, if they do have to use it, it would be
beneficial for them to be using fenbendazole and not
to be using the ivermectin, so it would be an
incentive. And if we were to get rid of the need
to involve the veterinarian for the fenbendazole,
similarly, that would be --- help it to be more the
material to reach for in that emergency. Now
again, I'm saying is that these are only used ever
in emergencies. They're not used on a prophylactic
basis as they are on conventional farms.

MEMBER CHAPMAN: I move to suspend the
rules of the agenda to consider the discussion
document on parasiticides at this time.
VICE CHAIR FAVRE: I have a motion. Do I have a second?

MEMBER STONE: Second.

VICE CHAIR FAVRE: Okay, all those in favor of suspending the agenda to ---

MEMBER SONNABEND: Could you repeat the motion, sir?

MEMBER CHAPMAN: This motion is to suspend the rules of the agenda to consider the discussion document on parasiticides at this time. It's just a motion to reorder.

VICE CHAIR FAVRE: Yes, all we're doing is moving the discussion document up into discussion. So I have a motion and a second, all those in favor of allowing discussion of the discussion document, please raise your hand.

Okay, I think we're good with simple majority.

MEMBER MARAVELL: I just have a point of clarification. Do we have a motion on the floor already? So do we have to do something? You guys figure it out.

MEMBER CHAPMAN: The motion on the
floor remains, we're just considering a different item.

VICE CHAIR FAVRE: Yes.

MEMBER CHAPMAN: And we'll come back to it in the agenda, reordering the agenda.

VICE CHAIR FAVRE: We have nested motions at the moment. We have a motion within a motion.

Okay. I would just like to contribute a comment in that first of all, I know way too much information about dung pat preparation for scientific studies after reading the technical articles from Kent Henderson that was provided as part of the public comment. I have sheep, I'm very fortunate that I have a parasite-resistant breed that so far I have not had to do any de-worming of any sort, but I do recognize that to Mac's point, sheep seem to be sort of fragile and go from healthy to dead very quickly if you're not careful. My vet actually told me the number one and number two killers of sheep in Texas are parasites and coyotes, predators, in that order, so, yes.
So this is a pretty serious issue. I was struck by the comments of one of the presenters for public comment, where he did allow us how that he could get moxidectin, and Francis has confirmed that as well.

That was my big concern is, you know, like me, I live in a small town. If I had a parasite problem, yes I have a vet, but a small producer can't always afford to have a vet come out at the drop of a hat any time something goes wrong, and it would sure be great if you could run down to Tractor Supply like I do and have it. But to find out that it's over the counter -- the one concern that I did have about fenbendazole is the veterinary requirement, but also it's an injectable versus a pour-on, and -- but I think most of us that have livestock have become proficient with doing injections if we need to.

Oh, it's also an oral? Okay. Okay. So --- and I'm very fortunate that I have a pretty good dung beetle population on my property, and I wouldn't want to see them impacted by the decisions.
But some of the technical papers that we received as part of public comment did actually demonstrate to me pretty effectively that in a well-managed pasture where it's used only in emergency situations, the impact is not significant on dung beetles. However, having said that, I'm still going to be in favor of removal of ivermectin.

Okay, do we want to have a discussion on the discussion document? Jean, since you wrote that, do you want to kind of give at least a very brief overview, maybe a summary?

CHAIR RICHARDSON: Yes. Well, do you -- we're going to be discussing it, so do you want me to be sort of reading into the record the various public comments?

VICE CHAIR FAVRE: Yes, let's do that.

CHAIR RICHARDSON: Okay. I was hoping I could do this later and get it fresh in my brain. Keeping everything all together you know is hard at my age.

We --- there's some present confusions in the present annotation language. I'm going to
start there I think. Fenbendazole is the most environmentally benign and it's annotated to require written order of the licensed veterinarian, that's an important aspect to keep in mind. Ivermectin and moxidectin do not require a veterinarian.

We did --- and we sent out some questions, as you know, in order to get information for this discussion document that we could use in the spring to bring back a proposal to you. We got a large amount of response for all of the questions that we proposed. Excellent, actually, really, really, really good comments from the public from all over the country have given us an enormous body of material that we can work on to come up with I think a really good proposal for the spring, and one of the questions we asked was whether or not all or some of these materials, the parasiticides, should be on written order of a licensed veterinarian.

There were very few suggestions that we would continue to have a written order of a licensed veterinarian. As I recall, I'm not going to try to
list all of them, because we did have a lot of
comments. The certifiers feel like it would be
much easier to track the use of the parasiticide if
there was a written order of a licensed veterinarian
so that when the inspector goes around, they could
review the vet bills and see when it was being used,
and that would give them a clear understanding of
which animal by ID number had been -- on the health
records had been cared for by a veterinarian and the
parasiticide had been used.

Farmers, however, have a much different
view of it because it is often not just a hassle,
but also an added expense in the marginal profit
that we get on our farms to be bringing in a vet when
you want to determine whether or not the fecal egg
count on the farm has reached the point where you
need to do some de-worming of some animals.

And so from the farmer's perspective,
the idea that any of these --- the fenbendazole
would be on the written order of a licensed
veterinarian, that is an anathema to them, and it
would seem --- and of course as you know,
conventional farms don't have to work with a veterinarian to use parasiticides.

There was, however, quite a lot of the public comment that indicated that farmers should be spending more time actually doing parasite egg counts in order to determine if the breeds of sheep or goats, especially, that they have are such that they're beginning to build up parasite loads which would require a dewormer, and usually this, as you know, takes place in the earlier months or first year of life more typically.

And so, you know, farmers should be obviously being encouraged to be looking at fecal egg counts, and also to be looking for dung beetles. I can't wait to tell inspectors at the IOIA that one of their jobs is going to be as an inspector is go out and count dung beetles, however, that should be quite a riot. As an inspector myself, because I like that, but then, you know, I'm a strange person when it comes to things like dung beetles.

So I think that the --- I think, based on the public comment, we'll be suggesting in the
proposal that we don't need to have veterinarian for any of the --- and I'm just going to continue to assume all three are still on the list --- for any of the three of these materials.

When it comes to moxidectin, it is presently listed for control of internal parasites only. When it was put on the list, it appears that the moxidectin, which is fairly widely used as a pour on, again, under emergency situations only, and that when it's used to control internal parasites, it will also de facto control external parasites, as we found from the literature and material that's come in to us from veterinarians especially.

So this for control of internal parasites only phraseology that was in the original annotation for the moxidectin was written based on incorrect information at the time based on the half-life of the moxidectin in the soil. And so I think based on, again, all of the public comment that we've had come in, that moxidectin should not only remain on the list but also that the annotation
for control of internal parasites only should be removed so that it could be used internally as well.

We had on the next questions, we had on the --- one of the questions that we posed in our --- I'll go through some of the questions. When we sent this out to public comment, we asked about the milk withholding period, and if so, how many days should the milk withholding be, and we did get back an enormous amount of comment on the withholding period for milk.

At the present time, there's a 90-day withholding, but there seems to be wide consensus that the 90 days is much too long as a withholding, one, because it may motivate a producer to withhold the needed treatment because of the severe economic consequences of a 90-day withdrawal, and secondly, fenbendazole and moxidectin have no milk withdrawal time for use in conventional production. However, it is important to note for ivermectin that the lengthy withdrawal period of time is still indicated in terms of the label use under FARAD.

So for --- if you're going to be using
fenbendazole or moxidectin with the -- on dairy, then you would be able to have a considerably reduced period of time, withdrawal period. One veterinarian stated that fenbendazole is not in the milk after three days, and so, you know, you're starting with the three days --- I don't think we would go that low, but if it's no longer in the milk after three days, then that gives us one point at which we could start to reduce the withholding for in milk animals, and 14 days is recommended as the length that would be good for beef. So --- and those are with fenbendazole, and it would be similar I think in moxidectin. Again, I have to fully analyze all these materials before we take it back to, you know, when we'll go back to Subcommittee and re-look at it.

So we've had suggestions of five-day withdrawal for the parasiticides moxidectin and fenbendazole, and even from groups that are more consumer-oriented. They see that this need -- you would be taking care of the animal because you must control parasites obviously. If you have an animal
with parasites, you can't just let them be in misery. So you do have to be able to help them by some form of parasite control. And I should comment that there are obviously homeopathic and other forms of parasite control that are also used by many farmers, like the Crystal Creek alternative, for example. But again, this is only in emergency situations we're looking at.

One of the questions we posed was, should minimal use of parasites be allowed in organic slaughter stock such as permitted under the Canadian organic standards, where there's one treatment for slaughter animals under one year old, and two treatments for older animals, and if they have more treatments than that, that's when they lose their organic status?

I did not see much positive feedback from any part of the stakeholder group to adopt that Canadian organic standard, and many of them commented that it would be much too hard for the farmer and the certifier to track this in and out kind of use and keep track of all the individual
animals, and so that may not be one of the items that we would bring forward in a proposal in the spring.

The third question that we posed for public comment was, should sheep fleece and wool be allowed to be certified organic even if the use of parasiticides was necessary at some point in the animal's life? There was broad support for that from our stakeholders all over the country, because obviously as you know, we're at a serious disadvantage from a market point of view, never mind anything else, by not being able to sell sheep fleece and wool as organic. And this would have a positive impact not only for the farmers, but also in terms of the supply of materials for fiber. So farmers and a broad range of certifiers and veterinarians and so on felt that even if the animal's meat could not be used as slaughter stock, that the sheep fleece may be able to be used after the use of parasiticides.

There was, however, some recommendations for a withholding length of period of time for the sheep fleece usage, that it wouldn't
be the same as for milk, it wouldn't be three days or something, it would be a longer period of time. And there were a number of different lengths of different days proposed for us to look at and review when we take this back to Subcommittee.

I've already covered the moxidectin, we think it should be used both internal and external. I've already covered the veterinarian one. So we did put out these five questions. Let's see if I've covered what needs to be covered.

We had excellent feedback from veterinarians. So here's one on sheep fleece, for example, from a veterinarian. Should sheep fleece be allowed? Yes, if an extended withdrawal time was observed. So for --- if they used moxidectin and fenbendazole, a withholding time of 14 to 30 days should be -- would be appropriate. Ivermectin should not be allowed and should be removed from the list of allowed synthetic treatments for organic livestock. This is from a veterinarian out in the Midwest.

So --- do you want me to read more of
these? I mean, there's vast amounts of them, so, but I could --- maybe I should just leave it to answer questions. So that's sort of the general gist of where we're heading. Francis, do you think that's giving us enough to --- from a discussion point of view? Mac?

MEMBER STONE: No, thank you very much, and that helps sort of frame today's conversation very much because it digs a little deeper into the discussion and input to that discussion helps a lot today.

VICE CHAIR FAVRE: Tom?

MEMBER CHAPMAN: I would like to hear from the other members of the Livestock Subcommittee on their thoughts on this if we were to not sunset ivermectin at this time, but plan to have it be removed when these annotation changes occur. So it would be a joint proposal to remove ivermectin as well as make the annotation change, that way it would occur all at the same time in rule making.

MEMBER STONE: I won't be here, but that
sounds logical because we will learn more in another set of public comment around those discussions. I was just saying that that sounds logical based on there's going to be another set of public comment, a little deeper dive into it, which helps for today again I think.

VICE CHAIR FAVRE: So just so we're clear, Tom was asking the question how the Committee would feel about voting on ivermectin today, potentially leaving it on today so that it could be combined with an annotation change that we would bring in the spring, with a potential vote for removal depending on public comments. Colehour?

MEMBER BONDERA: I think I understand; however, for clarification sake Tom, those would be totally, completely separate proposals. One would be changing annotations, and a separate one would be removal of something from the list. So you were saying could we consider—could the Subcommittee consider proposing or petitioning that we remove ivermectin from the list somehow in a—it wouldn't be in direct association, but somehow related to our
work with annotation issues. I'm pretty sure that's what I've heard.

VICE CHAIR FAVRE: Yes, you're--

MEMBER BONDERA: So they both go forward at the same time to the Secretary for action.

VICE CHAIR FAVRE: Zea, and then Harold.

MEMBER SONNABEND: I have two questions and maybe I should know this, but I don't. One is it doesn't work with veterinarians that you could just have the veterinarian come out once a year, and then they would give you a prescription for enough parasiticide for the whole year, or do you have to have them come out every single time you need to use it?

MEMBER THICKE: I think you would have to have them come out and prescribe it at the time, that's kind of what a prescription would be. But I think there's another point, too, is that when farmers have been--livestock producers been around the circle a few times and have done fecal count,
they can see an animal and see the symptoms and know what they are, and I know when I have calves, I can tell if they have any kind of wormy thing. And another point I want to make, too is I don't use any of these parasiticides. There are a couple of companies that make some natural things they've researched the FDA has not approved. One company called their original product ParAttack, and the FDA told them they couldn't use that name because it implied that it controlled parasites. And so they changed the name, but they don't necessarily kill the parasites, but they help the animal expel them, and I find that when I have calves that are looking like they have parasites, I use these products, and they come out of it. So I guess that we need to look at there are natural alternatives out there, and that we need to try to find some way to encourage that kind of use. Go ahead.

MEMBER SONNABEND: Sure, but I would think that you know, the phraseology working with a veterinarian on this means that you don't call a different vet each time you have a problem; you have
a regular vet, and so the regular vet could know you
well enough to trust that you'd recognize the
symptoms and use it in a responsible manner rather
than have to call them every time.

MEMBER THICKE: But then why couldn't
they just do it on their own? It's a over counter
drug, all these are, anybody can buy them in the
store--

MEMBER SONNABEND: Okay. Okay. So my
second question is if this seems to be your general
proposal to vote off ivermectin but keep the other
two, then why is the vote out of committee to remove
moxidectin, too?

VICE CHAIR FAVRE: Francis, he did
speak to that, but I'll let him answer it.

MEMBER THICKE: We did it in part to try
to get some comments, because sometimes if we don't
get people's attention, we don't get the comments
we need. And we did, it did work, we got a lot of
comments that helped us--no actually that's true,
we needed to start out ivermectin and moxidectin,
and we needed to know, and I don't think we would
have gotten those comments if we hadn't pushed a little bit. And we were uncertain for that matter also, we didn't know what's out there and what the needs are.

VICE CHAIR FAVRE: Okay. Harold?

MEMBER AUSTIN: Did the Subcommittee take and look or turn up anything as far as--because both moxidectin and ivermectin are in the same chemical classification as far as mode of action. So you've got one being used internally, one being used topically; was there any concern about resistance management from two chemicals from the same chemical classification with the same mode of action?

VICE CHAIR FAVRE: I think I'll let Lisa take a stab or--we did actually discuss that, and actually wondered whether we needed both of them for that reason. When we were first having the discussion about whether all three were needed, I think initially we did actually consider whether or not we needed just fenbendazole, and I for one strongly argued against having just a single
parasiticide for concerns regarding to developing
of resistance, and I like the idea that we have two
different drugs from two different classes that
work in slightly different modes of action.
Francis, do you want to add to that? Okay.
Harold, follow up?

MEMBER AUSTIN: Yes, follow up. Do we know which is the older of the two materials between those two materials on moxidectin and ivermectin?

VICE CHAIR FAVRE: It's my understanding that ivermectin has been around for a very long time; moxidectin is a relatively newer formulation and it did come on to the list later.

Nick, did you have a question or comment?

MEMBER MARAVELL: Yes, I did. Are we done with this portion of the discussion, because I'm going to consider--

VICE CHAIR FAVRE: Well, let me go around the room. Do we have any more questions or comments in regards to the discussion document? Carmela?

MEMBER MARAVELL: I was just saying on
this issue of resistance in the class of chemicals, it was my understanding there was a slight difference between ivermectin and--they are in the same class, but there was a slight difference between them, and I did want to ask the Committee, I effect following up on Harold's question, what did you gather any information about the relative resistance that already exists to these parasiticides?

VICE CHAIR FAVRE: Francis or Jean, do you want to address that, and if not, I mean--

CHAIR RICHARDSON: Well, ivermectin is typically not used in dairy, so it's mostly used in the sheep/goat group. There seems to be some resistance to the ivermectin in some parts of the country, and it really depends on a combination of factors. The breed of the sheep, the extent of--the range of ailments that they're infected with, et cetera. So there is some obvious immunity with ivermectin in some areas, highly variable geographically and depending on the breed of animal. As I say, not really typically used in
dairy, and therefore you don't sort of see that information there. The issue with the moxidectin is again that you're not able to use it internally at the present time, only externally, so therefore you're not comparing apples and apples when you look to--and fenbendazole is a little more--is a newer parasiticide. And it's my understanding that when they put moxidectin on the list, the idea was that that would allow ivermectin to sunset, but because of that external annotation, that that hasn't happened, at least that's one of the reasons. So it's not a simple question that you're asking, but obviously there appears to be a considerable efficacy right now with fenbendazole; the assumption is that, especially seeing it on conventional farms, is that you'll see the same functional improvement with moxidectin as well.

VICE CHAIR FAVRE: Carmela, did you have a question?

MEMBER BECK: So I am extremely reluctant to want to remove materials from the National List if there's still an identified need
and it still meets OFPA criteria, and so there was mixed public comment, mostly in favor of removal, but I did see general comments in favor of keeping it. So I'm wondering two things. One, I'm wondering if Mac can speak to now the removing ivermectin and feeling comfortable with that from your perspective, and I'm also wondering about the individual on the Subcommittee who voted in favor of it, if their opinion has changed since public comments been issued.

VICE CHAIR FAVRE: Mac, you want to address that?

MEMBER STONE: Sure. So if the Committee comes back as we've discussed with this proposal in the spring, if ivermectin has a 90-day withdrawal, that's a decision that the farmer/rancher would make, versus the shorter withdrawal of a similar acting product. The certifiers are going to be very active in monitoring all of that aspect of it. So my inclination, especially if there is an East/West sort of a cultural difference, like we have--I haven't seen
a dung beetle in Kentucky in years; we don't have them. In fact, I might haul some dung home from Texas sometime, but I'd be inclined to, if I were on the Board in the spring, I'd be inclined to not take away a tool that is a rescue only so that farmers and ranchers would have access and make their own decisions with their certifiers. Based on the annotation changes that are being proposed, I still would sort of lean towards not taking that tool away, which I intend to do today and not take tools away and let this work out in the spring.

VICE CHAIR FAVRE: I would like to make a comment, and then Francis. I recently went to a hair sheep association meeting at Langston University in Oklahoma, where they had been doing some research on parasite resistance in three different breeds of hair sheep, which was funded by a USDA grant by the way, so thank you. It was interesting, I think they're in year three of the study, and they're finding that while individual animals amongst different breeds are showing a
certain amount of resistance, and that's looking at packed cell volumes and fecal egg counts and all sorts of things, the aren't finding that there's inheritability so far in the results, which they were a little reluctant to even disclose because what that means is you might have resistance among individual animals, but they're not able to predictably inherit the resistance, despite the fact that that seems logical that they would. So parasite resistance is a very complex issue; I believe it's as much about management as it is about the animals, and one of the things that occurs to me as part of this discussion is if we leave the withdrawal time significantly longer for ivermectin than the other two, we might be self-limiting on the use of ivermectin to Mac's comment, and that if you have an animal that's resistant to a parasite that moxidectin doesn't work on, you'd probably do that first because you'd have the ability to a shorter withdrawal time, but then if it's a matter of saving the animal's life, you still might go to ivermectin if nothing else
works. So that's just something to think about. And I think it was Francis had his hand up, and then Jean, and then Nick.

MEMBER THICKE: I've got a question for Mac. Do you suppose speaking of tools that moxidectin would be an inadequate tool as compared with ivermectin? I mean, do we need both tools? It's like if you're working on your combine, and you need a 960 inch wrench, and you look and you've got--have a Snap On 960 inch and you have a Craftsman one, do you need them both, and you need to lug them both around the field?

MEMBER STONE: Yes, absolutely. Sometimes you need open end, and sometimes you need a box end wrench, right?

MEMBER THICKE: They both have it. They both have it.

MEMBER STONE: So but no, I think--so even in emergency use, because sheep are problematic animals in general, that you need to have that tool available. Resistance to the compound is much less likely because there's a lot
of resistance in conventional flocks, and some
people are losing control all together because
they've already run through their resistance of all
of these products. So to me, it's a little bit
about access and what your TSC has available and
some of that kind of stuff. So but I would--two
different modes of action are definitely in play;
I could debate whether the ivermectin and the other
one both need to be, but again, that's a tough
decision based on access and a farmer/rancher's
particular situation.

VICE CHAIR FAVRE: Okay Jean, then
Nick, then Calvin.

CHAIR RICHARDSON: Yes, and I think
that it's particularly important at this point
where we're thinking about removing an important
tool is to note the big difference between the
eastern and western United States and between sheep
as opposed to dairy, and the fact that in the West,
they really have not caught on to using
fenbendazole, for example, and the fact that
there's confusion, sometimes even between
veterinarians as to whether or not one of the main 
ones that they want to control, which is this 
haemonchus contortus element, there's not a 
understanding that the fenbendazole addresses that 
as well as the ivermectin, and yet the ivermectin 
is building up some immunity as we can assume. 

So I think that--and many of the 
comments that we got of course were from dairy 
producers, so where this issue is not as great as 
it is with regard to ivermectin, which is rarely 
used on a dairy farm. So there's a lot of little 
moving parts for us to look at. I think if we end 
up, since we're sort of still on this discussion 
document, if we're standing out a lot of detail in 
the proposals, we may well begin to sort of 
re-educate folks out West, so to speak, to say you 
know, here's another tool that you can actually be 
using, and then can start working with it even 
before we perhaps make these annotation changes. I 
think also I should just mention that lungworm is 
another parasiticide that we need to consider which 
of those three are best addressing that or what
combination with natural alternatives.

VICE CHAIR FAVRE: Nick, and then Calvin.

MEMBER MARAVELL: I have a two part here. The first is to take on a question about the use of parasiticides for sheep for the harvest of the wool; in your asking of that question, did you get a sense of whether or not people in favor of that would use the parasiticide just once twice, or was there any concept of how often that would be a permitted practice? And then I have a second.

CHAIR RICHARDSON: Use of parasiticides really amongst the sheep/wood producers, if they're organic, they can't use it prophylactically; they can't use it on a regular basis. They can only use it in an emergency, just as in any other situation. So I mean they'll still have to identify those sheep that no longer become slaughter stocks that are viable, so they'll--right now what happens is, as you probably know, and that's why there's so little wool on the market, is that once they've identified animal number 35 is no
longer organic slaughter stock, therefore the wool from that animal can't right now be organic. And so that animal may still get sheared every year for the next 10 years, and it's only had one dose of ivermectin, for example, then it seems like a remarkable, awful hardship in that situation where the sheep may live for many years, and even though it's never going to be slaughter stock to eat, it could still have been selling year after year its wool, and there's a lot of support for that to take place as imagined, especially in the western United States, if that answers your question.

MEMBER MARAVELL: Right, but my question was you could treat that same sheep that lived 10 years on an emergency basis once a year 10 times; is that--I was just wondering if there was any concept of how that would be--

CHAIR RICHARDSON: That would be unlikely. If you did treat it, it would be once; there would still be a withholding, so you're still not going to be able to give the animal a parasiticide one day and then shear it and sell the
wool as organic the next day. There will still be a withholding. But yes, it would not happen continuously throughout the year. And of course obviously, these sheep farmers, in addition, they're still doing pasture rotation in a large area, and the large area they have for the animals to graze in in their pasture, depending from East to West, will reduce the likelihood of re-infection in the same season.

VICE CHAIR FAVRE: Calvin, and then Ashley.

MEMBER MARAVELL: Okay. All right.

MEMBER WALKER: This is my last day on the Board, so I'm going to get out of a lane with no repercussions. I do support keeping all three of the parasiticides. The Western Organic Dairy Producers Alliance, TOM, of 250 organic dairy farmers in Indiana, Texas, Washington, Oregon, Utah, California asked that we keep ivermectin on the list. There was a beef farmer in California asked that ivermectin also be kept on the list. I use it; it saved my dog's life, Hercules, with
heartworms, and the other reason I'm keeping it is because the livestock group has very few materials on the National List, and this material is only used in an emergency situation. It's not something that you give to your animals or inject every day. So based on that, I will be voting to keep all three on the list.

VICE CHAIR FAVRE: Ashley?

MEMBER SWAFFAR: I'm going to change lanes from my traditional lane. So when I got on this Board, I didn't know every substance on the National List, but ivermectin was the one that just shocked me that it was on the list, just because you know, growing up around a lot of conventional farms, I mean that stuff is everywhere, and I was just absolutely shocked. And then coming from the poultry industry we have nothing; we use natural alternatives; they work; we manage our levels. So just because we remove ivermectin, they still have two parasiticides and they have natural alternatives. Don't forget that, because those do work. So I'm still going to keep my vote to remove
IVERMECTIN.

VICE CHAIR FAVRE: Nick?

MEMBER MARAVELL: Yes, the other thing I wanted to mention is anecdotal. We don't use parasiticides, but we run beef, and we did participate in USDA sponsored on farm research with the Greenbelt Agricultural Research Center and in a breeding program to breed resistance to parasites plus management practices. And it was successful. I'll just put a little note there, but when the lead researcher left to go elsewhere, USDA literally pulled the plug on his 17 years of research and his semen collection, and sold his herd of brute calves and bulls to auction, which I thought was most unfortunate because what I'm suggesting here is that with some attention to detail, we can move away from parasiticides, and I urge the study that you were referencing in that they try to go over a longer period of time, because we did find it was inherited, and we have never had to treat any animals born on our farm for parasites.

VICE CHAIR FAVRE: I think that the
research is continuing, they just gave us an update on the three-year benchmark of it. Okay, so what do we think, are we ready to vote? We beat the horse dead rather than beat the dead horse?

   MEMBER MARAVELL: Are we voting on accepting the discussion document, or are we voting on the motion? Just tell me what I'm voting on.

   VICE CHAIR FAVRE: Yes, we don't have to vote on the discussion document. All right. All right. So, everybody with us out there? You all haven't given up on us, huh? Okay, don't forget the dung beetle. Okay, all right. So, first up is as a reminder, we're voting on these separately. So the first up for the vote is fenbendazole. Those in favor of removal of fenbendazole, please signify by raising your hand. Those opposed? Abstentions?

   MEMBER CHAPMAN: Zero yes, 14 no; the motion fails.

   VICE CHAIR FAVRE: Okay. Next up for vote is ivermectin. Those in favor of removal of ivermectin, please signify by raising your hand.
Those opposed? Abstentions?

MEMBER CHAPMAN: I have 6 yes, 4 no, 4 abstentions; the motion fails.

VICE CHAIR FAVRE: Finally, we have moxidectin. Those in favor of removal of moxidectin, raise your hand. Those opposed? Abstentions?

MEMBER CHAPMAN: Zero yes, 12 no, 2 abstentions; the motion fails.

VICE CHAIR FAVRE: Mac?

MEMBER STONE: I do have one footnote, for those of you that have dung beetles, I heard a story on public radio that they navigate using the Milky Way, that when they block their access to the Milky Way with this little helmet thing, they roll the dung balls in this funny pattern and when they had access to the Milky Way, they rolled the ball in a straight line back to their nest.

VICE CHAIR FAVRE: Okay, those of you that were following that, yes you can block the aliens from probing your brain if you will wear a foil helmet.
CHAIR RICHARDSON: And on those profound observations, we will take a 15-minute break, and be back at about 25 minutes to 11 to continue with livestock.

(Whereupon, the above-entitled matter went off the record at 10:16 a.m. and resumed at 10:35 a.m.)

CHAIRMAN RICHARDSON: All right, if we could all take our seats. I think that we're ready to continue on with the livestock materials.

And we do have an enormous amount of stuff to get through today. So, if you would take your seats, I'll be able to turn the meeting back over to the chair of the Livestock Subcommittee in order to continue the material.

VICE CHAIR FAVRE: Thank you, Jean. Our next material to discuss this morning is Peracetic Acid. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (a)(19), Peroxyacetic/Peracetic Acid, CAS Number 79-21-0, for sanitizing
facility and processing equipment. Thank you.

VICE CHAIR FAVRE: Thank you. So, Peracetic Acid is used as a disinfectant. It's a relatively new development.

Quite often it was acetic acid and hydrogen peroxide before. They both have a longer history of use in livestock production. But, more recently Peracetic Acid has gained in favor.

Public comment was overwhelmingly in support of relisting Peracetic Acid. Noting that the material is more effective with longer efficacy than chlorine. And is critical to proper sanitation in human and animal health.

One commenter did ask that when the NOSB reviewed the material, determine whether it's still necessary. And I think I'm confident that we've answered that question.

Is there any discussion on Peracetic Acid?

(No audible response.)

VICE CHAIR FAVRE: Seeing none, those in favor of removal of Peracetic Acid, signify by
raising your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)

MEMBER CHAPMAN: Zero yes. Fourteen no. The motion fails.

VICE CHAIR FAVRE: Okay. Next up is Phosphoric Acid. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (a)(20), Phosphoric Acid. Allowed as an equipment cleaner provided that no direct contact with organically managed livestock or land occurs. Thanks.

VICE CHAIR FAVRE: Jean?

CHAIRMAN RICHARDSON: Yes. Phosphoric Acid is widely used. And it is widely support from the community of all stakeholders.

And it was voted unanimously in Subcommittee that it should remain on the National
List.

VICE CHAIR FAVRE: Any discussion on Phosphoric Acid?
(No audible response.)

VICE CHAIR FAVRE: Seeing none, those in favor of removal of Phosphoric Acid, please raise your hand.
(Pause.)

VICE CHAIR FAVRE: Those opposed?
(Pause.)

VICE CHAIR FAVRE: Abstentions?
(Pause.)

MEMBER CHAPMAN: Zero yes. Fourteen no. The motion fails.

VICE CHAIR FAVRE: Next up is Poloxalene. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (a)(21). Poloxalene. CAS Number 9003-11-6.

For use under 7 CFR, Part 205, the NOP requires that Poloxalene only be used for the
emergency treatment of bloat.

VICE CHAIR FAVRE: Francis?

MEMBER THICKE: There really isn't much more to say. It's used for acute bloat. And for beginning bloat other things can be used. But this is for emergency use only.

So, there weren't a lot of comments on it. But, there was support for relisting it.

VICE CHAIR FAVRE: Okay. Discussion?

Colehour?

MEMBER BONDERA: Yes, thank you. Francis, I don't know if you can remind me, or expand on, I thought that we had a comment from Dr. Karreman regarding delisting on this item if I recall in review.

That's why I ended up voting to delist. And I'd like you to comment on that --

MEMBER THICKE: Yes.

MEMBER BONDERA: And/or update if you --

MEMBER THICKE: I'm sorry. Dr. Hugh Karreman did say olive oil and other vegetable oils
can be used.

However, he said -- indicated that often you have to treat with these oils before it gets to the point of the animal getting, you know, ready to die. It's very fast.

And normally what people do, is when they get that far is, they pull their pocket knife out and stick it in their stomach and let the air out. And so, his point I think is that there's very lit -- there's a very little window where this material actually could be use -- would be used.

VICE CHAIR FAVRE: Any further discussion? Nick?

MEMBER MARAVELL: Yes. I'm not quite following here. So, that there are natural alternatives and equally as effective, but if we don't get there in time, we pierce the rumen and release the pressure.

So, what would make this, you know, preferable to using the natural alternative? Was there some -- did I miss something in that?

MEMBER THICKE: I think the drawback
would be you'd have a hole in the cow's rumen.

MEMBER MARAVELL: No, but I -- what I was hearing is that -- is the Poloxalene any more effective? In other words, you could have that hole either way is what I, you know?

Well, all right, so I don't understand. We don't have the problem. I don't understand.

VICE CHAIR FAVRE: I'm just going to offer an observation that we need to be careful about arbitrarily removing materials that got onto the list for a particular reason. There may be some alternatives out there.

But, particularly in the case of acute bloat, I think that would warrant having something for emergencies. And I'd hate to see us arbitrarily remove it just because we think it's not needed anymore.

Nick, I understand your -- Francis?

MEMBER THICKE: I guess bloat is something as you know, that comes on quickly. And the at symptoms you can just get the cow awake in the field where it's causing it.
And you can walk them around. And you can put maybe a tube down the -- its throat. And you can do things. But as it gets worse and worse, you have to use more and more drastic measures. And this -- apparently this Poloxalene is something that will be effective even when you get to the point where the oils won't be effective.

MEMBER MARAVELL: Okay.

MEMBER THICKE: Yes.

MEMBER MARAVELL: That's what I was asking. Thank you.

MEMBER THICKE: Okay. Sorry.

MEMBER MARAVELL: Thank you.

VICE CHAIR FAVRE: Thank you. Okay, any further discussion?

(No audible response.)

VICE CHAIR FAVRE: All right. Those in favor of removal of Poloxalene, signify by raising your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)
VICE CHAIR FAVRE: Abstentions?

(Pause.)


VICE CHAIR FAVRE: Okay. The next step is Tolazoline. Dr. Brines?

DR. BRINES: Thank you. Tolazoline is included at Section 205.603 of the National List under (a)(22), Tolazoline. CAS Number 59-98-3.

Federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian in full compliance with the AMDUCA and 21 CFR Part 530 of the Food and Drug Administration Regulations.

Also for use under 7 CFR Part 205, the NOP requires (1) use by or on the lawful written order of a licensed veterinarian; (2) use only to reverse the effects of sedation in analgesia cause by Xylazine; and (3) a meat withdrawal period of at last eight days after administering to livestock intended for slaughter and a milk discard period of at least four days after administering to dairy
animal.

Thanks.

VICE CHAIR FAVRE: Francis?

MEMBER THICKE: Yes. Tolazoline is use in conjunction with Xylazine, which is the next material that we're going to look at.

Xylazine is used as a sedative and pain killer and muscle relaxant and in bio-dip. And Tolazoline is used to reverse the effects of Xylazine.

So, we had some comments in favor. They were basically, I think, all in all that we don't have much reason to remove it.

VICE CHAIR FAVRE: Discussion?

(No audible response.)

VICE CHAIR FAVRE: Seeing none, those in favor of removal of Tolazoline, raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those against?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)
MEMBER CHAPMAN: One yes. Thirteen no. The motion fails.

VICE CHAIR FAVRE: Next up is Xylazine.

Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (a)(23), Xylazine. At CAS Number 7361-61-7.

Federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian in full compliance with the AMDUCA and 21 CFR Part 530 of the Food and Drug Administration Regulations.

Also for use under 7 CFR Part 205, the NOP requires (1) use by or on the lawful written order of a licensed veterinarian; (2) the existence of an emergency; and (3) a meat withdrawal period of at least eight days after administering to livestock intended for slaughter and a milk discard period of at least four days after administering to dairy animals.

Thanks.
VICE CHAIR FAVRE: Okay. Colehour?

MEMBER BONDERA: Thank you. Let's see, where to start with this one? It's pretty simple.

And I realized at this meeting in the last process that I keep writing down myself a note. And Lisa just repeated it, as to the understood definition of the word emergency is interesting. Especially since she just read that.

And it said you must have a licensed veterinarian recommendation. And then the next line is, and you must have an emergency.

And so, I feel like that that word is an interesting word that keeps getting used. That's interesting.

Like, Francis stated, Xylazine is the sedative, a painkiller, a muscle relaxant. It's used in conjunction with Tolazoline.

I think that we worked through the issues of the history of this process in terms of where its use is permitted. Public comment as well as Subcommittee vote were in support of the
relisting in general.

And I think that the only other thing that I want to add to this is to make sure it's in the record that I strongly feel that in the future within the NOSB, that the two items, Xylazine and Tolazoline should be considered and reviewed either by the same person or in more -- in some methodology that would allow associated reviews.

Because you know, when we're talking about them, it's hard to talk about them separately. Because they aren't needed or used separately.

And so, I want to make that note. But otherwise, thank you.

VICE CHAIR FAVRE: Discussion on Xylazine?

(No audible response.)

VICE CHAIR FAVRE: Those in favor of removal of Xylazine from the National List, please raise your hand?

(Pause.)

VICE CHAIR FAVRE: Those against?

(Pause.)
VICE CHAIR FAVRE:  Abstentions --
Jennifer, is that an abstention or an against? I can't -- okay, abstentions?
(Pause.)
MEMBER CHAPMAN:  Zero yes. Fourteen no. The motion fails.

VICE CHAIR FAVRE:  Okay. Next up for discussion is Copper Sulfate. Dr. Brines?

DR. BRINES:  Thank you. This substance is included at Section 205.603(b) of the National List as topical treatment, external parasiticide or local anesthetic as applicable, (1) Copper Sulfate. Thanks.

VICE CHAIR FAVRE:  Thank you. Copper Sulfate, we've had lots of conversations about Copper Sulfate since my time on the Board.

Primarily used as a walkthrough footbath to help control and prevent hoof related diseases in dairy cattle and sheep. Usually it's a 5 to 10 percent Copper Sulfate solution.

Concerns using -- about using Copper Sulfate include the -- primarily the disposal of the
Copper Sulfate solution. It's quite often dumped into the lagoon with other manure and then at some point applied to the land.

It's interesting, in public comment we've had several people in oral testimony as well as written, state that they haven't seen the Copper accumulation that has been expressed by some people. Particularly I think in western States where the soils are slightly Copper deficient.

In some cases it hasn't been a problem at all. But nevertheless, that has been one of the concerns about accumulation of Copper Sulfate.

We did ask -- Zinc Sulfate was actually recommended for inclusion on the National List at the spring meeting. And while it's not yet through rulemaking, hopefully that will give producers an opportunity at some point to maybe switch it up some time.

There actually are some studies that show a combination of zinc and Copper Sulfate combined, thereby reducing reliance on both. And the percentage of both has actually be more
effective than one over the other.

One group opposed an -- group proposed
an annotation require soil testing to monitor for
Copper accumulation.

Comment was also received refuting the
TR statement that there are no non-synthetic
alternatives to Copper Sulfate. In particular a
hydrated line was put forth as an alternative to
control fungal diseases in cows and sheep.

The vote coming out of Subcommittee was
yes -- one yes to remove, five no, two absent. Do
we have any discussion on Copper Sulfate?
Colehour?

MEMBER BONDERA: Yes, thank you. I
hereby request that the suggested annotation be
considered by the Livestock Subcommittee as
something to add to future work plan. Thank you.

VICE CHAIR FAVRE: Just on clear. The
annotation requiring soil testing?

MEMBER BONDERA: Yes, thank you.

VICE CHAIR FAVRE: Okay, thank you.

Any other discussion on Copper Sulfate?
(No audible response.)

VICE CHAIR FAVRE: Seeing none, those in favor of removal of Copper Sulfate from the National List, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)


VICE CHAIR FAVRE: Okay. Next up is Formic Acid. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603(b) of the National List. And reads as (2) Formic Acid, CAS Number 64-18-6. For use as a pesticide solely within honey beehive. Thanks.

VICE CHAIR FAVRE: Colehour. That was yours, right?

MEMBER BONDERA: Yes. Thank you. Right, so Formic Acid is used to control varroa and
tracheal mites in bees. I want to pull it over here, but I'm trying to do too many things on my table.

But, like I put forth in the recommendation via communication with the largest honey producer in the State of Hawaii who I'm not going to declare a conflict of interest of being friends with, but I know fairly well.

You know, in the state of Hawaii he's able to, he has the land space to be producing large volumes of certified organic honey. Not all of his honey is organic.

But, that is his ideal. He's fourth generation beekeeper. And he stated to me, like I said, I put forth there that without Formic Acid, his 4,000 hive operation would completely no longer be able to be certified organic, having worked and tried all of the other possibilities.

So, despite the fact that I am not thrilled and do not generally encourage the listing or relisting or dependency on synthetics, you know, we didn't get a lot of comments on this. And you
know, the Subcommittee was supportive of not removing from the list.

I am left feeling like this is something that we have to recognize that if the bees die, we're not going to go very far. So, thank you.

VICE CHAIR FAVRE: Tom?

MEMBER CHAPMAN: So, Colehour, if you could clarify this product -- is this livestock product really dependent upon a synthetic like ethylene to pineapple?

MEMBER BONDERA: Yes, but -- and I don't really want to get into the open conversation that you're almost opening the door for in terms of realistically and honestly. They're extraordinarily different.

This is frankly an external parasiticide, a local anesthetic like it states, like Lisa read. This is to deal with honeybee hives when the problems that I already referred to, varroa and tracheal mites are permitted in.

And to very briefly respond to your comment, it's -- ethylene gas in pineapples is just
to induce flowering. That is why it's used. That's not in response or dealing with an uncontrollable problem that you're having, that you're responding to in "emergency" fashion.

So, yes, but no.

MEMBER CHAPMAN: Thank you.

VICE CHAIR FAVRE: Any other discussion?

(No audible response.)

VICE CHAIR FAVRE: Those in favor -- Harold?

MEMBER AUSTIN: I agree with Colehour. I think it's critical material needed for the beekeepers. I've had a lot of exposure with our local beekeepers up here.

Although they may not be organic, some of them, but they definitely rely on this material in their hives for treatment of the parasites that attack the bees for varroa mite, tracheal mite. So, I think it's definitely one of those materials for the beekeepers that it's essential.

And without the pollinators, a lot of
our crops aren't going to exist. So, I'm going to be in full support of this material staying on the list.

VICE CHAIR FAVRE: Any other discussion?

(No audible response.)

VICE CHAIR FAVRE: Okay. Seeing none, those in favor of removing Formic Acid, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)

MEMBER CHAPMAN: Zero yes. Fourteen no. The motion fails.

VICE CHAIR FAVRE: Next step is Lidocaine. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (b)(4), Lidocaine, as a local anesthetic. Use requires a withdrawal period of 90
days after administering to livestock intended for
slaughter. And seven days after administering to
dairy animals. Thanks.

VICE CHAIR FAVRE: Jane?

CHAIRMAN RICHARDSON: Yes, Lidocaine
is a simple, topical treatment. It's important in
the humane treatment of animals undergoing minor
surgery or for dehorning for example in cows.

And it is very broadly supported by all
members of the organic community. And in
Subcommittee the vote was unanimous to keep
Lidocaine on the National List.

We will be addressing the issue of
perhaps reducing the withholding period in a few
minutes when we get to that discussion document.

VICE CHAIR FAVRE: Thank you. Any
discussion on Lidocaine?

(No audible response.)

VICE CHAIR FAVRE: All those in favor of
removal of Lidocaine, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?
(Pause.)

VICE CHAIR FAVRE: any abstentions?

(Pause.)

MEMBER CHAPMAN: Zero yes. Fourteen no. The Motion fails.

VICE CHAIR FAVRE: And just a point of clarification. We did have Iodine in the list as next. But when we did the vote last time, we did it for both listings. So that's why we got to skip it.

Okay. Next up is Lime Hydrated. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (b)(5), Lime Hydrated. As an external pest control not permitted to cauterize physical alterations or deodorize animal waste. Thanks.

VICE CHAIR FAVRE: Hold on a second. You caught me asleep at the wheel here for just a minute.

Hydrated Lime, produced primarily by
heating Calcium Carbonate which results in a Quick Lime. It can be caustic if inhaled. Respiratory protection should be used during application.

We did have limited public comment on this. Citing the essentiality of the material for controlling external parasites and for control of foot infections.

The Subcommittee was unanimous in its decision to retain Hydrated Lime on the list. Any discussion? Francis?

MEMBER THICKE: I just want to say that we should be encouraging use of Hydrated Lime in place of Copper Sulfate for hoof or foot pads.

VICE CHAIR FAVRE: Yes, thank you. Any other discussion?

(No audible response.)

VICE CHAIR FAVRE: Okay. Seeing none, all those in favor of removing Hydrated Lime for the Nation List, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)
VICE CHAIR FAVRE: Abstentions?

(Pause.)

MEMBER CHAPMAN: Zero yes. Fourteen no. And the motion fails.

VICE CHAIR FAVRE: Next up is Mineral Oil. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (b)(6), Mineral Oil for topical use and as a lubricant. Thanks.

VICE CHAIR FAVRE: Okay. Mineral Oil was approved in 1995 on the National List. Public comment was extensive in support of this material, almost unanimously in support, citing its importance in fly control.

The vote out of subcommittee was one yes, to remove, two no, one abstention, one absence. So we had a little bit of a mish-mash there.

Any discussion on Mineral Oil?

Francis?

MEMBER THICKE: Yes. I'm the one who voted against it. Not that I'm going to vote
against it today. But, I think that Mineral Oil is used often where we could use vegetable oil.

And like for example fly control. I found that organic soybean oil sprayed on the cow's back will key the horn flies on contact.

And so there are a lot of places where Mineral might be needed. But I think in a lot of places where we could use vegetable oil and we don't need to use Mineral Oil.

I just wanted to put that on the record.

VICE CHAIR FAVRE: Other comments?

(No audible response.)

VICE CHAIR FAVRE: Okay. Seeing none, those in favor of removal of Mineral Oil from the National List, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

MEMBER CHAPMAN: Two yes. Twelve no.

The motion fails.

VICE CHAIR FAVRE: Okay. Next up on
our list is Procaine. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (b)(7), Procaine. As a local anesthetic.

Use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and seven days after administering to dairy animals. Thanks.

VICE CHAIR FAVRE: Jane?

CHAIRMAN RICHARDSON: Yes. Procaine. Sort of interesting its -- I mean it's similar to Lidocaine in being used as a simple topical anesthetic.

However, what's interesting about this one and puts you on the horns of a dilemma is that we have public comment which indicates that Procaine is not readily available in the United States. And does not appear to be being used per se, as itself.

And it may not be essential. And it may not continue to be needed. So, for example, I heard
from one veterinarian that says that Procaine should be removed from the National List of allowed synthetics because to my knowledge, it has no use by itself in livestock in the United States.

And certifying agencies around the country make comments such as we do not observe this material being used by any of our farmers. The -- let's see, several veterinarians said it's never used and it's not available in the United States.

And other organizations, consumer organizations, remain neutral on this. Or would suggest that it be withdrawn.

There are no specific problem criteria so to speak of our six, you know, ones that we typically -- or seven, that we look at. Except for the issue of necessity, essentiality kind of things.

It doesn't appear to be essential. It doesn't appear to be necessary. So, it could be removed. Although I'm always reluctant to remove one of the tools in the toolbox where it doesn't seem to be causing any problems.
So, it's up to you guys what it is that you wanted to do with this one. Francis, do you have some ideas?

VICE CHAIR FAVRE: Ashley?

MEMBER SWAFFAR: Jean, were you able to confirm if it was available in the U.S.? Or not available?

CHAIRMAN RICHARDSON: I couldn't find a source of Procaine on its own as a -- no. I couldn't find a source of that in the U.S. at the present time.

And that certainly was confirmed by the Veterinarians that provided us with written public comment.

VICE CHAIR FAVRE: Nick?

MEMBER MARAVELL: Jean, is Procaine used with Lidocaine in formulation?

CHAIRMAN RICHARDSON: No. Procaine and Lidocaine are not used together.

VICE CHAIR FAVRE: I did actually -- oh, excuse me, Francis. I did actually have a conversation with someone who told me that Procaine
is sometimes used for on farm surgeries in the United States.

So we might want to consider that. Francis and then Tom.

MEMBER THICKE: What I saw in one of the comments to, and what I've heard is that Procaine is often mixed with antibiotics. And so that's why it's not used alone often.

That's -- which is -- it can't be used by us anyways then.

VICE CHAIR FAVRE: Tom?

MEMBER CHAPMAN: Okay. I just wanted to note that we did get, I think it was 14 checklists from farmers saying that they used it.

VICE CHAIR FAVRE: Okay.

MEMBER CHAPMAN: Or that they wanted to continue its allowance.

VICE CHAIR FAVRE: Jean?

CHAIRMAN RICHARDSON: Yes. I sort of found that a little bit confusing to me. Certainly the certifiers say that its not used. And the only forms in which I've ever seen it being utilized is
with antibiotics. 

So, therefore, it couldn't really have been used on organic farms. So, that was sort of a confusing comment to me in terms of how to deal with it.

VICE CHAIR FAVRE: Tom?

MEMBER CHAPMAN: Jean, are you aware of all certifiers commented? Okay.

VICE CHAIR FAVRE: Okay. Any further discussion on Procaine?

(No audible response.)

VICE CHAIR FAVRE: Okay. Seeing none, all those in favor of removal of Procaine signify by raising your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)

VICE CHAIR FAVRE: Tom?

VICE CHAIR FAVRE: Okay. Next up is Sucrose Octanoate Esters. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (b)(8), Sucrose Octanoate Esters. The CAS Numbers 42922-75-7, 58064-47-4. In accordance with approved labeling. Thanks.

VICE CHAIR FAVRE: Francis?

MEMBER THICKE: So, Sucrose Octanoate Esters, SOEs, are surfactants that lower the surface tension of liquid. And they're also registered as -- by EPA as a biopesticide.

And it's used to control soft-bodied insects like mites. Especially with honeybees. And we didn't get a lot of comments. But we had a few comments in favor of it.

And the Subcommittee thought that given the problems beekeepers are facing, that we should leave it on the list. And we voted unanimously to keep it on the list.

VICE CHAIR FAVRE: Any discussion on SOE, Sucrose Octanoate Esters? Tom?
MEMBER CHAPMAN: Is it only used in the beekeep area?

MEMBER THICKE: We don't know that because we didn't get enough comments to know where it's really used. And so, it could be used more widely.

But, I can't answer that.

VICE CHAIR FAVRE: I think it's probably important to note that it's considered fairly benign. And does break down rapidly, biodegradable.

It's not persistent nor does it tend to accumulate in the environment. Any further discussion?

(No audible response.)

VICE CHAIR FAVRE: Seeing non -- Jennifer?

MEMBER TAYLOR: Are there any alternatives that go with kind of the management strategies that can be used with that?

VICE CHAIR FAVRE: She was asking if there were any natural alternatives that can be used
instead? No, I have bees.

I'm not a beekeeper on a commercial scale. I do have honeybees. And there are other means for controlling mites. Including dusting with powdered sugar and things.

But I don't know that that's practical on a commercial scale. Harold?

MEMBER AUSTIN: Yes. There's nothing that I'm aware of that would be an alternative for this one. For how it's intended use is.

VICE CHAIR FAVRE: Any further discussion?

(No audible response.)

VICE CHAIR FAVRE: Okay. Seeing none, those in favor of removal of Sucrose Octanoate Esters, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)

MEMBER CHAPMAN: Zero yes. Fourteen
no. The motion fails.

VICE CHAIR FAVRE: Okay. Thank you.

Next up is DL-Methionine. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (d) as Feed Additives, (1) DL-Methionine, DL-Methionine Hydroxy Analog and DL-Methionine Hydroxy Analog Calcium. CAS Numbers 59-51-8, 583-91-5, 4857-44-7, and 922-50-9.

For use only in organic poultry production at the following maximum levels of synthetic Methionine per ton of feed. Laying and broiler chickens, two pounds. Turkeys and all other poultry, three pounds. Thanks.

VICE CHAIR FAVRE: Okay. So, I'm having a little bit of deja vu and PTSD on this material.

We should note for the public that we did actually pass a revised annotation on this material in La Jolla that allows for a use of two pounds average for layers, two and a half pounds for broilers and three pounds -- these are all averages
over the life of the flock.

That did pass in La Jolla. I think most of those in the audience are quite familiar with this material from having been in lengthy and divided conversations about this in the past.

I won't belabor the point except to say that there was continued support and opposition to this material. Generally those in favor of continued listing indicate that -- and just so you know, we're going through and voting on the Sunset in the event that the rulemaking for the annotation change doesn't get through in time so that we don't have a gap.

So, this is sort of a bookkeeping, administrative function here. But, generally those in favor of continued listing indicate that it is critical to the production of organic poultry and cite issues around animal welfare.

Those against continued listing expressed deep concerns around the continued and routine use of its synthetic ingredient in organic animal feed. And predict erosion of public trust
if synthetics remain in organic poultry production.

One group has reiterated the position that Methionine is hormonally active and can be misused as a growth stimulant. Others have rejected that assertion and insist the material is necessary to meet nutritional requirements for the bird regardless of the management practices.

And by that I mean whether there is indoor or outdoor access. Commenters on both sides of the relisting of this material have urged organic producers to continue to research options for non-synthetic Methionine.

And we did hear in public comment from a member of the Methionine task force that gave us some updates on the work that they're doing on that since our last meeting. Before we open it up for questions from the Board, we'll let Miles speak to it.

MR. McEVOY: Yes. I just wanted to give an update on where we are with the recommendation on Methionine.

It's part of a proposed rule that we plan
to publish really early next year on some -- with Methionine and a number of other recommendations made by the Board on amendments to the National List.

So, that's moving forward very smoothly at this point. And we should have a proposed rule out on this early next year.

VICE CHAIR FAVRE: Thank you, Miles. Any discussion on Methionine? Calvin?

MEMBER WALKER: Madam Chair, could you speak to the group where we're at with the organic poultry working group for the Board, had passed a resolution 15 to zero in terms of moving that along?

CHAIRMAN RICHARDSON: Yes. Thank you for reminding me. I did not mention the resolution we passed, did -- as Calvin stated, was unanimous in that we urged the industry to move forward with research into genetics management practices and other materials that don't rely on synthetic Methionine.

We did bring this before the Executive Committee out of Livestock. Asked to put it on our
work agenda immediately.

However, we've been asked to delay that due to the work load with Sunset. And it's still up for discussion for inclusion.

We have submitted a full proposal for how we might move forward to that to the program in the Executive Committee. So, we're hopeful that it will be on the work agenda soon. Thank you.

Calvin?

MEMBER WALKER: And I think that needs to be done. I will be off the Board and I know that the organic poultry group that's there during public testimony, that that organic poultry working group, it's a good thing.

So, I hope that the program would allow that to go forward.

MR. McEVOY: Yes. We have received the request for this organic working group. Part of our question is the purpose and the scope of it.

Is this an organic working group that just consists of the Board and the program and other government entities? Or does this also include
external parties?

If it includes external parties, then we have to move forward with an official task force. Which is more involved. We certainly can do that.

But, that's more resources. And it takes more time to set up an official task force to the Board to report to the Board on this particular topic.

So, we're still, from our perspective, looking for clarification from the Board on exactly what it is that you're requesting so we can facilitate supporting this work.

VICE CHAIR FAVRE: Nick?

MEMBER MARAVELL: Are you looking for that clarification now? Or when?

MR. McEVOY: We don't need that clarification now. This is usually something that is done at the Executive Committee level.

So, we're certainly open to hearing your thoughts. But, we don't need that specific clarification at this point.

VICE CHAIR FAVRE: Ashley?
MEMBER SWAFFAR: I'll say this is the least active we have all talked as a Board on Methionine. I think we're a little tired of it. But I just want to go on the record and say that Methionine is an essential amino acid required by poultry. And in my experience working with flocks with the minimal outdoor access to outdoor access 108 square foot per bird, we still need Methionine in every one of those flock scenarios that we have.

So, this is essential for organic poultry.

VICE CHAIR FAVRE: So, just a point of clarification and then we'll come to Colehour. As a follow up to that Ashley.

So, you're saying that you don't see a change in need from Methionine, whether they have large amounts of outdoor access on pasture or not?

MEMBER SWAFFAR: That is correct. On our big pastured operations, we don't have very many bugs around because they're awful smart.

You look outside of our fences,
grasshoppers everywhere. It's like they know where the chickens get to. It's a chase.

So, you know, that's been brought up a lot in comments that, you know, they'll get -- they'll forage on insects and things like that. But, we don't have any insects in our field.

VICE CHAIR FAVRE: Colehour?
MEMBER BONDERA: Yes, thank you. Like you said, this is the same old, same old to some degree. But I don't disagree with Ashley's experience or her comments.

However, I think that we need to recognize or at least be honest about two simple aspects. One is, synthetic courses of Methionine. Nobody has questioned or stated, I haven't heard one person ever say that poultry doesn't need Methionine. What they've said and what all of the discussion has been about, is the source of Methionine.

So, I think that's a vital clarification that needs to not be let slip through the cracks. And I think that although it's been referred to, I
think we need to make sure that we're cognizant of, you know, when you do something like look at the western European ways of raising poultry and this process, it brings up -- and that's not an example, it's just a comment.

Because it brings up the reality. And I've interacted here at this meeting and in past now years with people. It comes down to some degree or is highly correlated with breed.

And so we need -- that word was included when Tracy commented and said genetic. But I think that we need to recognize that synthetic Methionine wasn't depended upon in poultry raising, you know, if you look historically for very long.

So, I think that we need to be cognizant and careful. And recognize that organic can be different.

And strive to achieve rather than strive to rely on some dependency that's been created via genetic changes and via synthetic formulations that have been put forth. Thank you.

VICE CHAIR FAVRE: Ashley?
MEMBER SWAFFAR: Yes. One thing I want to talk about breeds just a little bit. Because that gets brought up quite a bit.

For us in the U.S., we have four commercial strains of ground birds. Is it four or five? And you know, they are bred for laying. That is their thing.

And I hear a lot of people talk about we should use alternative breeds and things like that. Some challenges that we face as an industry with that is the fabulous rule that the FDA put out called the Egg Safety Rule.

And that requires that chicks come from an MPIP Salmonella Enteritidis clean hatchery. And a lot of the alternative breeds, those hatcheries cannot meet those requirements mandated by the FDA.

So that's a challenge in the poultry industry that we have looking at alternative breeds. That's our biggest issue.

VICE CHAIR FAVRE: Colehour?

MEMBER BONDERA: Excuse me, thank you.
I do hear you and agree. And I'm aware of this. But I think that to some degree along the lines, and I hadn't actually intended to respond to it, but I think Miles, when he brought up this Methionine working group versus an appointed task force, in terms of how this subject is being pursued, relates back to the fact that yes, you know, this isn't the simple situation.

Because the Federal Government at different levels, like you just said, the FDA have restrictions. So, there isn't -- the breeding stock because it's not happening because of the control.

But, that's not our role within the NOSB. All we can do is make -- and I'm not saying that Miles or the NOP can do anything. This isn't an easy process.

But, you know, I think my recommendation or encouragement is that the NOP needs to talk to the FDA. And say look, this doesn't function within the rubric of organic poultry production.

You know, and work and strive to
achieve, you know, I don't -- I'm not going to call them exceptions or changes. But I think like I said, this, you know, the NOP taking its action and efforts down this path in a different way then we are capable of, I think could and should be happening simultaneously and be sought.

And I don't want to get too far off base here. But, I do want to comment about the fact that when Miles was stating this regarding the Methionine working group is unclear what about an appointed task force.

What popped to my mind was all of a sudden we have a hydroponics task force appointed. Where I don't remember the NOSB recommending that it needs to be -- we need a hydroponics task force.

What I remember is that it was unclear to the NOP what was wanted. And they couldn't get what was wanted from the NOSB. So, they reached that conclusion.

The NOP is like, let's take the lead and take the action. My point is, the NOP can, and this example I just gave is an example of where they have
decided okay. We're going to figure out how to pursue these issues because the NOSB can't do everything in terms of coming up with the right process.

So, yellow flag is all I'm raising.

Thank you.

VICE CHAIR FAVRE: Thank you. Calvin?

MEMBER WALKER: I was at mega dittos Colehour. The organic poultry working group, the reason why I raised it, is that we passed the resolution. It may not be in that form, Miles.

But something of that nature needs to be. Because five years from now, I'll be in Louisiana hearing the fight over Methionine again.

So, something needs to be done to provide to the Livestock Subcommittee on this matter in some form or fashion.

VICE CHAIR FAVRE: Miles?

MR. McEVOY: Okay. We're hearing the message. Thank you.

VICE CHAIR FAVRE: Ashley?

MEMBER SWAFFAR: So, on that point
Calvin, I think even if NOP doesn't take swift action as to our request, I think the industry has heard our statements loud and clear.

Every time I talk to somebody they say hey, here's what I got going on. You know, we've looked at this. We've looked at this. And we're working on this study.

So, I think we're going to see a lot of work out of industry on this. And that makes me really happy that they get our message of we need a solution to this.

VICE CHAIR FAVRE: Last comment.

MEMBER WALKER: One of my views is I think Katrina Heinze mentioned about the continued fighting in the press among Board Members about this issue here. I just think that if we can't get synthetic Methionine off the books, we need to find a way to grandfather in the organic poultry producers at some level.

And that was in the minority report. Because five, ten years, this fight continues. And it does nothing but hurt the label of organic if we
continue to fight over this issue.

VICE CHAIR FAVRE: Any further discussion?

(No audible response.)

VICE CHAIR FAVRE: Okay. Seeing none, all those in favor of removal of DL-Methionine from the National List, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)

VICE CHAIR FAVRE: Okay.


VICE CHAIR FAVRE: I'm delighted to say that will probably be my last vote on Methionine while I'm on this Board. Thank you.

Next up is Trace Minerals.

DR. BRINES: This substance is included at Section 205.603 of the National List under (d) as Feed Additives, (2) Trace Minerals used for
enrichment or fortification when FDA approved.

Thanks.

VICE CHAIR FAVRE: Okay. From the Livestock Subcommittee review in 1995, the recommendation citing that producers may often not be able to control the quantity of vitamins and minerals natural occurring in feed stuffs. Hence the vitamins and mineral supplements.

Public comment weighed heavily in favor of continued listing of Trace Minerals, citing the essentiality of minerals to ensure animal welfare and to offset variables and forage nutrition due to seasonality.

One group did suggest an annotation to limit synthetic minerals to use for those times when forage quality is inadequate for proper nutrition.

Any discussion on Trace Minerals? Jennifer?

MEMBER TAYLOR: So, will the Livestock Subcommittee reexamine and add an annotation that deals with that?

MEMBER SONNABEND: Louder please.
VICE CHAIR FAVRE: She asked if we would consider the Livestock Subcommittee looking at a potential annotation. I personally am disinclined to.

For the simple reason, I have livestock. And it would be incredibly cumbersome to -- I mean, there are certain times of the year when the nutrition is not there. When my forage and my pasture goes dormant.

And for me to have to document that fluctuation throughout the season would be a pretty significant burden. Because pastures vary.

Different feed stuffs and different pastures. And if you rotate your animals and graze them and move them every day, then you significantly have to be testing.

And I don't think it's a very practical suggestion actually. But, I'm open to hearing comments from others on the Committee.

Jean?

CHAIRMAN RICHARDSON: Jennifer, I'm not clear what the annotation line would be. What
was it that you had in mind?

MEMBER TAYLOR: I was wondering if it might address, we have a comment here that addressed and she read it. When foraging and available natural feed are in poor quality.

And so, I was wondering if that would be something that the -- yes. She read it and that answered it.

VICE CHAIR FAVRE: So, she was just reiterating the suggestion that the annotation read something that we would limit synthetic minerals to use for those times when forage quality is inadequate. Jean?

CHAIRMAN RICHARDSON: As someone that does a lot of livestock inspection, as an organic inspector, that really isn't terribly practical. Because what happens is you work with a -- typically the farmers that I would see in the northeast, they work with an individual feed company with a nutritionist on that -- at that feed company. And also with their veterinarian and with the breeds that they're working on.
And they determine an annual cycle of feed mixes that they want for their animals. And they're fed different ratios depending on the breed, the area that they're in and the age of the animal.

And so, you can't sort of just keep switching feeds when you -- up and down like that. Those premixes, they're set. And they're buying them at so many tons at a time.

So, I think it's an interesting concept, but it's not practical.

VICE CHAIR FAVRE: Okay. Jennifer?

MEMBER TAYLOR: Can you tell me how scenarios would flow if you're looking at a rotational type of pasture management and dealing with Trace Minerals. Is that a different kind of scenario then what you said?

VICE CHAIR FAVRE: Yes. I mean, the difference would be that like for instance a dairy animal who gets, you know, with the pasture rule they're required to get a minimum of 30 percent DMI off pasture for 120 days within the grazing season.
But forage quality over 120 days can vary pretty dramatically depending on whether it's, you know, grass or alfalfa or, you know, wheat, or whatever. You know, there are such variations.

And typically when you're -- even dairy animals that are out on pasture are still moving across different pastures. So you might have one paddock that's deficient and the next that's not.

So, it's very difficult to say. There is some belief -- I happen to be one of those people that believe this -- that animals sort of instinctively know when to seek out minerals when they need them.

And there is something called free choice cafeteria style minerals where they're laid out and the animal can choose what they need when they need it. So, it's a little bit self-limiting.

And salt, which you typically put out all the time for livestock anyway. So, I think it's -- if you were feeding an animal in a barn all the time, you would fluctuate their diet and maintain nutrition.
But, with pasture, it's much trickier. Much, much trickier. And of course we want to encourage as much pasture access and as much forage from pastures as possible.

So, to me, I think it's just not practical. I appreciate your perspective. And I understand why you want to see that. But, I just don't think it's very practical.

Jennifer?

MEMBER TAYLOR: The farmers on -- that sit on the Board, are they using any kind of -- how are they using the Trace Minerals on their farms?

VICE CHAIR FAVRE: Mac? Francis? Do you guys use minerals? I can speak that I do use minerals. Mac? Francis?

MEMBER STONE: In Central Kentucky we're blessed with some beautiful soils. They say that's the reason the horses are there. Because the sport of kings picked the best soils in the world to raise the horses.

But the only thing that the beef, the certified organic, grass fed, dry aged, choice beef
that we sell, the only thing it gets is Elmwood Stock Farms and salt are the lambs that we sell.

VICE CHAIR FAVRE: Francis, do you want to speak to that?

MEMBER THICKE: Well, in Iowa we know we have the best soils in the world. But we've lost half of them since we started farming to erosion.

But what I do is, I have gone to using something from a company in Wisconsin that produces a grazing salt mineral mixture. They mix up -- their research -- a nutritionist has put this together.

And they mix up what they find to be generally the best mix. And then I have a free choice for the cows.

And in the summer, when they're on pasture, they probably don't need as much. Because the fresher forage and the vitamins and minerals are more readily available.

In the winter, when they're on store day, probably the need more.

VICE CHAIR FAVRE: Nick?
MEMBER MARAVELL: Well, I'm sorry to disappoint you two gentlemen. But we have some of the best soils in the mid-Atlantic on our farm. And we use a mineral mix that is from a particular company for a trail that is designed for our mid-Atlantic area. And we also change the mix between the forage season and the non-growing forage season.

In addition, we put out free choice cow pen, free choice sea salt or reaping salt. And we have done in the past extensive soil tests just as a baseline.

And the way that we look at it is whatever the cattle aren't using is going -- because we graze 100 percent, is going back out in the soil. And these are all trace elements.

And so, we're not overly concerned about it. In fact that's one of the ways that we've remineralize our soil.

VICE CHAIR FAVRE: I would echo that sentiment. And it also occurred to me, I was sitting here thinking about the variations in
mineral requirements depending on the class of livestock.

So, if you've got ewes with lambs onboard, in my case, I want to make darn sure that they've got the minerals that they need while those fetuses are forming. And so you can imagine if you're on a dairy for instance where you've got multiple classes of animals that you're rotating through, it would be an absolute nightmare trying to document that.

Mac?

MEMBER STONE: Based on the gentleman across the table's testimony, I rest my case.

VICE CHAIR FAVRE: Okay. Are we prepared to vote on this? Okay. All those in favor of removing of Trace Minerals, signify by raising your hand.

(Pause.)

VICE CHAIR FAVRE: Okay. Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?
(Pause.)


VICE CHAIR FAVRE: Yes, should we take a vote on who has the best soil in the room now? I didn't vote. But of course everything's better in Texas.

Next up is Vitamins. Dr. Brines?

DR. BRINES: Thank you. This substance is included at Section 205.603 of the National List under (d) as Feed Additives (3) Vitamins used for enrichment or fortification when FDA approved. Thanks.

VICE CHAIR FAVRE: Calvin?

MEMBER WALKER: Vitamins is one of those essential nutrients category for livestock along with minerals. Without it, poor animal welfare.

There was no really -- there was no opposition to relisting this material. Aurora Dairy, IOIA, CCOF, mentioned that there was 50 plus producers using this material.
Most of them listed 650 plus. Producers have a need for this essential material. So, it's just so foundational to the care and feeding of livestock.

VICE CHAIR FAVRE: Any discussions on vitamins?

(No audible response.)

VICE CHAIR FAVRE: Seeing none, all those in favor of removal of vitamins from the National List, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)

MEMBER CHAPMAN: Zero yes. Fourteen no. The motion fails.


Okay. Next up is Excipients. Dr. Brines?
DR. BRINES: Thank you. And this is the final material included at Section 205.603 of the National List under (f) Excipients. Only for use in the manufacture of drugs used to treat organic livestock when the Excipient is identified by the FDA as generally recognized as safe, approved by the FDA as a food additive or included in the FDA review and approval of a new animal drug application or a new drug application. Thanks.

VICE CHAIR FAVRE: Thank you. Jean?

CHAIRMAN RICHARDSON: Yes. Excipients. A very complicated group of materials. Probably about 8,000 substances will qualify as Excipients.

Although obviously not all of those are going to be found in all of the organic materials that we might look at. They are a critically important part of being in many of the healthcare products, such as teat dips.

However, there is obviously as we could tell from our discussions in Subcommittee when we're trying to look at these materials -- and
remember, we're looking at this as only one of 200. So, we didn't spend a huge amount of time on it because it is so complicated.

But we did observe. And we certainly received a lot of public comment that requests that we review Excipients again, after we've done this vote, back in Subcommittee.

In order to develop maybe an annotation or at least a list that might be part of an annotation that would help the people who are reviewing materials to have a much clearer idea where they go to, to find out exactly what Excipients are in there. Or what list did they occur on.

There are many different lists. And there is definitely a lack of clarity in terms of material review as to where we should all be going to look at these.

And I'll read one of the comments that came in only from a certifier. The present annotation is not clear. It allows for almost anything to be allowed as an Excipient.
But materials reviewers have to do research using multiple databases. CF Code, Federal Regulations, Title 21, Grass database, the EAFUS database, et cetera, et cetera, to gather that information.

A clear annotation should -- we need a clear annotation that should state which specific Excipients, if any, would not be allowed.

Synthetic Excipients are in almost every livestock healthcare product. And information on them is very difficult to obtain from manufacturers in certain cases like teat dip.

I think that we clearly got that message from a wide range of public participants and public commenters. From certifiers, from veterinarians, and from those groups that do materials review.

So, certainly I would be requesting that this is put on the agenda -- work agenda for the Livestock Subcommittee. But, obviously we have to, I believe at this present time, vote to keep all of the general phrase the way it is right now for Excipients on the List.
And we so voted in Subcommittee by unanimous vote to keep the category Excipients on the National List.

VICE CHAIR FAVRE: Thank you, Jean. I'll just state for the record that this is another one of those squirrelly listings where we have a lot of things lumped together that we end up having to deal with at some point later.

And it is a very difficult topic to try to address. Any discussion on Excipients?

(No audible response.)

VICE CHAIR FAVRE: Seeing none, all those in favor of removal of Excipients from the National List, please raise your hand.

(Pause.)

VICE CHAIR FAVRE: Those opposed?

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)

VICE CHAIR FAVRE: What did you say?

MEMBER CHAPMAN: One yes. Twelve no. One abstain. And that was it.

VICE CHAIR FAVRE: Okay. Next on the list is Strychnine.

DR. BRINES: Yes, this substance is included at Section 205.604 of the National List, non-synthetic substances prohibited for use in organic livestock production. Listed as (a) Strychnine. Thanks.

VICE CHAIR FAVRE: Jean?

CHAIRMAN RICHARDSON: Nobody wants to have Strychnine. And the recommendation in -- from public comment and from the Subcommittee is that it should continue to be listed as prohibited.

VICE CHAIR FAVRE: Any discussion on Strychnine?

(No audible response.)

VICE CHAIR FAVRE: Seeing none, all those in favor of removing the prohibition of Strychnine from the National List, please raise your hand.
(Pause.)

VICE CHAIR FAVRE: All those in favor of -- yes. So glad we ended with this one.

(Pause.)

VICE CHAIR FAVRE: Abstentions?

(Pause.)

VICE CHAIR FAVRE: Okay. Madam --

MEMBER CHAPMAN: Zero yes. Fourteen --

VICE CHAIR FAVRE: Excuse me. Go ahead.

MEMBER CHAPMAN: Zero yes. Fourteen no. The motion fails.

VICE CHAIR FAVRE: Madam Chair, that concludes the Livestock's presentation of 2017 Sunset materials.

(Applause.)

CHAIRMAN RICHARDSON: Wow. That's great. Okay. So, it goes back to you now for the one last item on Livestock?

VICE CHAIR FAVRE: Yes. We did actually have two discussion documents, the first
of which we've already talked about, which is the use of parasiticides.

The second one -- okay, is for a proposed annotation change for Lidocaine and Procaine use in livestock production. And I'll turn that over to Jean.

CHAIRMAN RICHARDSON: This is the -- we're not going to be voting on this today. This is just a discussion document.

It became obvious in our first round of looking at Lidocaine and Procaine in terms of staying on the -- for the Sunset review, that the withdrawal period is probably too long. And the way in which it was developed wasn't necessarily based on the two terms label use, you know, as the far out listing.

And so, we took a closer look at this based on public comment from the last meeting. And we sent out this discussion document in order to get further comment from the broader public.

So we did get broader comment back. And it was pretty consistent from a broad range of
The questions that we posed was, should the annotation for Lidocaine be amended to reduce it from 90 days to eight days after administering for livestock intended for slaughter and seven days after administering to dairy animals? And similarly for the procaine.

We got, I guess as I said, broad response. Plenty of public comments. So we should be able to come back to the April meeting with a proposal that would allow us to vote on a reduction of the withholding period for these two materials based on good science and comments from, as I say, a wide range of people, from veterinarians to the farmers themselves.

So, that's really all I need to say on this at this time. Since this is not a document to vote on.

But I'd be happy to answer questions from the rest of the NOSB.

VICE CHAIR FAVRE: Discussion?

(No audible response.)
VICE CHAIR FAVRE: I'd just like to thank Jean for all her hard work. We've turned over some of the worst and trickiest materials to her to tease out for us.

And that, coupled with a huge workload and handling and some other Subcommittees, has been an impressive amount of work that she's done.

As we've stated, this is a discussion document. There will be no vote on this. And we will take these, both of these discussion documents back to Livestock for consideration of annotation change for a presentation likely at the spring meeting.

And Madam Chair, if there's no further discussion, this concludes the presentation of the Livestock Subcommittee.

CHAIRMAN RICHARDSON: Thank you very much, Tracy. Our planned lunch break is not until 12:30.

If Calvin, Dr. Walker, if you're ready, my suggestion would be that we would move into materials report, a Subcommittee report at this
point. Because we do have a lot of other materials
that we -- and discussion in crops that we need to
be able to look at this afternoon.

And that should be able to take us
comfortably to a 12:30 lunch break. So, I would
turn this over to Dr. Walker for the Materials
Subcommittee Report.

MEMBER WALKER: Thank you, Madam Chair.
I would like to thank the handling Subcommittee, Dr.
Francis Thicke, Zea Sonnabend, Dr. Jennifer Taylor,
who else am I leaving out? Colehour Bondera and I
think -- and yours truly.

And from the program, it was Betsy
Rakola. She was very instrumental in the research
priorities and keeping that among the USDA agencies
that Secretary Vilsack appointed.

And we know she replaced Mark Lipson.
And so, she's been doing a good job. And Dr. Lisa
Brines was always on the call along with Michelle
Arsenault.

Hopefully that's enough to give
Jennifer time to get to her research priorities
document. And you have five minutes.

MEMBER TAYLOR: So, thank you so much for this opportunity to talk with you just a moment about our great research priorities proposal. I hope you've all had an opportunity to review some of the recommendations that are within the research priorities document.

As Calvin, our Chair has stated, our Committee consists of also Zea, Zea Sonnabend is Vice Chair. Harold Austin, Colehour Bondera, Francis Thicke and myself.

And again, we'd like to thank you for all of your comments that you've made to the Board as a whole. And also as you've taken time to address our research priorities that we've put before you.

As you know, the recommendation for a framework is that research priorities was first approved at the National Organic Standards Board in the May 2012 meeting. And part of that recommendation was that the research priorities from the previous years of the Board's deliberations would be presented at each fall
meeting such as during this time period.

The 2015 Board research priorities seek to solve critical, organic agricultural challenges and problems. The issues are often interrelated. And should be viewed through an organic, whole-farm integrated approach. And determined through the criterion of the organic system plan.

So, if you've had a time to review the information, you know that we've gathered information from several of the Subcommittees. And the topic areas include prevention of GMO contamination, evaluation of effectiveness.

Those are research topics coming from the Material and GMO ad hoc Subcommittee. As well as a policy recommendation, examining the policy on research on a mechanism that will encourage conventional growers to avoid contamination.

From the Livestock Subcommittee, we had several recommendations. And much detail is actually included in the document on prevention and management of parasites using a systems approach, a systems overview.
Also in herd and health -- lot health, and evaluation of synthetic and alternative sources for Methionine in the context again of a systems approach in organic poultry production.

The Handling Subcommittee submitted information or request as a topic, chlorine materials. Examining chlorine materials and their alternatives in specific situations and less toxic alternatives.

The Crops Subcommittee also took a systems approach. And submitted research addressing alternatives or a less toxic alternative to Copper for disease and algae control. And then the Evaluation and the Management of those strategies as well.

Then we also had a section within the document that looked at previous research topics and focus areas. Because as you know, this is new. Research takes years.

And it is something that we need to continually remind the research funding agencies and the community and our stakeholders that these
are important issues and critical to the success or organic farms and production systems.

We received comments from several of the organic community, including Beyond Pesticides, California Certified Organic Farmers, Cornucopia, Organic Produce Wholesaler Coalition, Straus Family Farm, OSGATA, the Organic Farming Research Foundation, the Center for Food Safety, the Organic Center.

And if you also would consider the hundreds and hundreds of comments that we actually received from the public. When the public says that they don't want synthetics or antibiotics in their food or in their growing system.

These are also research topics. And that we need to take and consider that way as an important topic area that we need to keep before the research community.

We appreciate all of your comments. And what we're going to do with your comments and they are very detailed and we appreciate that. And offer sometimes new ways of examining the issues
that we put forth in the document itself.

What we'll do is take those comments back into the Materials Subcommittee, and review them. And then integrate them into the research priority document for this year, where they're appropriate. And others may be forwarded onto the next year's document.

We, in our work with Ms. Betsy Rakola, who is the Organic Policy Advisor, she has said that she's forwarding this information. And it gets forwarded other ways as well.

As our talk that we had with Dr. Sonny Ramaswamy earlier this week. That's also another way to let him know and to become knowledgeable of our need to work in collaboration with his agency in providing organic research topics that will impact his agenda as he formally set agenda for his research requests.

But, Betsy has said that in her work that several -- a couple of organizations have now added the NOSB recommended research topics within their programs. And in the development of their proposal
requests.

Which is great. We want to move in that direction. And the interest in response that we received, which is available for your review as well, came from the Organic Center.

Whereas they wrote back and gave us great information of how they're actually taking our research priorities, the ones that we gave last year and the year before, and have integrated them into actual research projects that are ongoing. That they can have written bulletins and brochures about that have impacted growers.

And one of those research directions they say that they took from our 2012 and 2013 research priorities list, is alternatives to antibiotics, Tetracycline and Streptomycin for fire blight.

So, they say that they've completed a fire blight project which was carried out in collaboration with researchers from the University of Washington. This Organic Center project provided critically needed information on how to
prevent fire blight from discriminating apple and pear orchards without the use of antibiotics.

The published report includes lessons learned from a systems approach to controlling fire blight without antibiotics, which has been successfully used by dozens of Pacific Northwest organic orchards.

And then it goes on to say how they're going to -- how they're sharing this type of information. And these are the types of impacts that we were hoping to have come out of providing this list to our research public and our stakeholders.

Another emphasis they said was, in taking from the 2014 research priorities list, examining plant disease management. And they report on that project that they have found organic solutions to control citrus greening disease in an ongoing project in collaboration with the University of Florida, the University of California Davis, List ARS, and citrus growers and other nonprofits which directly address the 2014
priorities for plant disease management.

Great. That is the direction we want to see this type of request for examining organic topics and organic critical needs.

Another topic they said that they had addressed is, or currently addressing, taken again from the 2014 research priority area is in soil building practices. They have an ongoing, they say, collaboration with the National Soil Project at Northeastern University.

And through this project they're examining different soil components that will enable agronomists, farmers and environmental scientists to correlate soil health and productivity with agricultural practices. To date they say that they've collected and analyzed almost 600 organic soils nationwide.

And they say that this study will provide organic farmers who rely on soil quality with a resource to facilitate remediation, maintenance and conversational soil resources.

Excellent.
Another topic that they said that they addressed is -- that they have addressed is risk reduction in off target exposure to non-permitted materials. And they said that they're currently undergoing this research project.

And that they'll have information available to the public soon. They're combining the research, of course, with the needed education and training for the farmer population.

And that is the kind of outreach, so to speak that we would need to see that kind of collaboration where research is taking place. And then turning around and sharing this information with the stakeholders and farming population in order to see change actually take place and impact in a positive way the organic farms and the organic program.

So I want to thank you so much for all of your comments. And I do want to encourage Miles, again, to please put in place our public docket system so that you will have an opportunity on an ongoing basis to forward information such as the
information that came from CCOF.

They actually provided over 50 different research items. And had we received that in a timely fashion, we might have been able to incorporate those kinds of information within the information that you received.

So, we're hopeful that that might be something that would encourage you to help us get that docket in place faster. And so that we can react in a timely fashion and work together to address the critical needs within the organic program.

Thank you.

MEMBER WALKER: Thank you, Jennifer. Any discussion? Zea?

MEMBER SONNABEND: I just want to add two points concerning this. One is that all the wonderful suggestions that we got for this comment period will be held and evaluated for our research priorities next year.

Because we can't make last minute changes on the document for this year. Maybe in the
future, if we have year round public docket, then
we can have a longer period of open to collect
suggestions. But, that's the way it is.

And then secondly, we spent a lot of time
in our Subcommittee talking about how we can get
better outreach for our research priorities.
Because some of them don't really fit in say the NEPA
grant priorities for field -- which are field
research oriented. And some organic oriented, but
some not. Not as much.

And some of ours, like GMO contamination
issues probably don't rise to the top on their
research agenda very often. And then of course the
handling ones would have to be investigated by more
food research or food safety research entities.

And so we do hope that all of you
stakeholders who have links to the research
community and academia and independent
professional organizations or other ways, can help
us circulate the need for research in these very key
areas that wouldn't be covered within the
government agricultural research arena. Or even
by something like the Organic Center for instance. But I'm sure many of you do have links outside of these particular areas to both researchers and funders of such research. And could help us get broader outreach for that since we are limited to nagging Betsy about it, or our public postings for the meeting.

Thank you.

MEMBER WALKER: Anyone else? I would like to say ditto to what Zea and Jennifer had mentioned.

All of us need to go back to our local States, land grant universities, there's 109. They have extension dollars, research dollars, teaching dollars for agriculture.

And in my five years on this Board I've seen so much written and written in such an eloquent and precise fashion. Some of these scientists can use you all, as Zea mentioned, and some of the issues that you have as it relates to organic.

Any other? Oh, I'm sorry.

MEMBER CHAPMAN: Zea already kind of
touched on this. But noted during the Sunset -- and
I noted it in the Sunset review, but we received
comments from all across the organic community in
support of researching organic alternatives to
conventional celery powder, freeze-dried processed
meats.

And that this research should be a
priority. This comment was received after the
Handling Subcommittee submitted our priorities to
the Materials Subcommittee, and so it's not part of
our priorities therein.

However, I asked the Materials
Subcommittee and the Administrator to take efforts
to make this a priority.

MEMBER WALKER: Are we ready to vote?

CHAIRMAN RICHARDSON: Dr. Walker asked
that I take the vote on this. There is a proposal
that you have all reviewed and discussed and read
public comment.

Is there any further discussion on this?

(No audible response.)

CHAIRMAN RICHARDSON: Seeing no
further discussion, could you all raise your hand if you approve this proposed document as presented?

(Pause.)

CHAIRMAN RICHARDSON: Anyone -- it looks like that was everybody. Does anyone object to accepting this document as presented? Discussion document?

(No audible response.)

CHAIRMAN RICHARDSON: Seeing none, to zero in favor of accepting the research proposal document. Thank you. Back to you Calvin.

MEMBER WALKER: Our last document has been led by Dr. Francis Thicke, GMO prevention strategist.

MEMBER THICKE: Thank you, Calvin. We received quite a few comments on this. We -- a lot of support for moving forward with this document, prevention strategy guidance for excluded methods in crops and handling proposal.

And just a minute ago, I realized we didn't have livestock in there. And we do have some recommendations for livestock. So they could put
that in there, too.

We had some good comment suggestions and even some criticisms saying -- telling us that this isn't going to do the job. And we know that. We know this isn't going to take care of GMO contamination.

But, it will help us and it will also help us externally that we're showing that we're doing what we can. Everything we can. And that others have to now help us out.

OTA reported data from a recent USDA National Ag Statistics on the service survey, which found -- was on contamination of organic farmer -- organic crops by GMOs.

And between 2011 and 2014, 87 organic producers reported a total of $6.1 million in crop losses from GMOs, which was an average of $70,000 per farm affected. So that's pretty significant.

So it was 87 during that three year period. But during 2006 to 2010, there were just nine farms contaminated. So, it's going up significantly. And it doesn't look good for the
for the future in that regard.

Some of the comments, specific ones, a lot of commenters say we need some help from outside. And we can't do this by ourselves.

And so -- well, I'll talk about that in a bit though. But another comment is that call for a seed purity standard. Remember the last time we brought this document forward, it had a section on seed purity.

And the Materials Subcommittee is going to keep on looking at that. And work on trying to bring forward a proposal on seed purity in the future.

Some specific comments are our certifiers say they need guidance on what GMO contamination levels should trigger some investigation. Another comment, Subcommittee should draft an additional recommendation to NOP for the creation of additional guidance in training of ACAs on conducting GMO sampling and testing.

A lot of comments saying this is a shared responsibility that we're already doing everything
we can. And we need others to do more.

For example, the National Organic Coalition, the USDA needs to require genetic engineering, GE users and patent holders to take deliberate action and mandatory preventative action instead of merely giving it lip service.

Beyond Pesticide said, the NOSB must call upon the Secretary of Agriculture to reverse this policy of allowing more and more genetically engineered crops. And to support legislation that places liability for damages on the patent holder.

OSGATA was very adamant that we need to have a strict testing threshold for organic seeds. So, some of the actions that we can do in the future is, perhaps we could send this document to NOSB -- I'm sorry, to Secretary Vilsack with a letter on the need for them to do more.

This -- showing him this is what we're doing. Now, what can you do to help us prevent this contamination? What can the makers and users of GMO technology do to help us?

Well, one specific comment that I would
like to actually include in the document, Organic Valley mentioned that aminofitic incompatibility.
I was thinking we could just put a bullet in telling -- saying consider crop varieties with aminofitic incompatibility when available on your farm.

So, that's something we could possibly put in that wouldn't really change a lot. And I don't think it would hurt as part of holding on the proposal.

So, that's all I have for right now.

Any comment?

MEMBER WALKER: Thank you, Francis. Discussion? Zea?

MEMBER SONNABEND: Yes. In reading the public comment I did see a bit of what I perceive as distress from some certifiers in particular. Who seem to think that these were required things.

That seed had to be tested. Or that a certain buffer had to be kept. But we just want to make clear, and it does say -- if you read it carefully -- in several places, that this is guidance.
That not every bullet point has to be addressed to every crop. This is best management practices. And you select which practices best fit your situation.

And it does say that the inclusion of information would be consistent with other guidance documents that the NOP has released to ACAs. So, we tried to set this up so that it is almost all things that people are already doing.

And it is not a lot more work for growers or certifiers or handlers. And it is, as Francis said, primarily to collect this all in one place so it can be used externally to show the other side, so to speak, all the steps that organic is taking.

To use it as leverage to get some concessions and get some acknowledgment from the GMO polluters.

MEMBER WALKER: Thank you, Zea. Dr. Richardson?

CHAIRMAN RICHARDSON: Yeah, I mean, I like the document. You know, but I think the challenge for me, as I look around, just looking at
the GMO issue, is we're seeing all this proliferation of all these various labeling.

GMO-free type labels that are being asked for by companies for various products. And the assumption that you can just go out there and do the testing to find out, you know, run out to the farm, check out to see if the seed that they have, or whatever it is, is sort of within a -- it's not going to be GMO-free I assume. But it's going to at least sort of be within a tiny amount pretty much free of GMO.

But we all know that when you start getting out practically and you're looking at these organizations around the country right now doing all the testing of GMOs to see, you know, what percentage of the seed might have GMO in it, there's -- those aren't labs that are being -- they're not under the USDA. They're sort of freelance folks who are getting money for doing the testing.

And there's plenty of anecdotal information, and I wonder if the Subcommittee discussed this, anecdotal information that,
really, depending on which lab you send it to, you're going to get a different response each time. And we haven't really looked -- we haven't really, as I think it says in the Appendix A that Calvin presented to us, there's no resources for us to do GMO testing in organic feed right at the moment, from our perspective.

And I think that it's a really murky area in terms of looking to see what level of contamination that there is when you do testing. And I'm quite concerned that the manner in which that is taking place right now around the country. Did you look into this? I'm assuming you did when you discussed the document on the Subcommittee. Francis?

MEMBER THICKE: Can I ask you clarify, Jean? Are you saying that the testing companies, there's not precision among them? Between them?

CHAIRMAN RICHARDSON: Right.

MEMBER THICKE: How bad is that?

CHAIRMAN RICHARDSON: Well, we didn't get a written comment on that. So it's anecdotal.
But it's not good.

MEMBER WALKER: Okay.

VICE CHAIR FAVRE: Who's following him?

MEMBER WALKER: Nick?

MEMBER MARAVELL: I'd like to make some comments over a slightly longer historical period here. Maybe from a perspective that's a little bit different than just the regular NOSB Board member. I might harken to what Senator John Tester says from time to time. Things look different from the tractor seat.

Five years ago, when I started on the NOSB, we met, I believe, in Seattle. And we heard from the organic community a lot of concern about what the organic community was experiencing in terms of the interface with the biotechnology world.

And my colleague here, Jennifer, introduced a resolution with a letter to inform the Secretary of what we were hearing. Actually, that's our statutory requirement. It doesn't say we may advise the Secretary. It says we shall
advise the Secretary on all matters pertaining to
the organic program.

That went around for about a year and a half. Or more, I don't remember. What we are
looking at here today is as is -- by the way, I mean
no disrespect to the hard work and the good work that
the Subcommittee has put in on this document. And
they have acknowledged what I'm about to further
reinforce. That this document is indeed sort of an
inventory of where we, in my mind, the deplorable
position we find ourselves in today.

I guess what I would like to say is that
I'm intending to abstain from this vote because I
don't want to be associated with having spent five
years working on an issue only to feel both saddened
and angry.

I feel saddened because I haven't been
able to participate in a process that has provided
any relief, any fairness, or any justice to the
organic producers and handlers out there in the
community. And I feel a little angry because I feel
victimized for having the audacity to farm while
being organic.

MEMBER WALKER: Zea?

MEMBER SONNABEND: Okay. Well, I'm sorry to hear that you're going to abstain, Nick. I feel like even if it takes five or 10 or 20 years, we have to keep fighting the good fight or it will totally overrun us. And therefore, this is one step in the fight, in moving forward and pushing forward.

But I want to go back and reply to Jean. Jean, we did not talk about the vagaries of different testing labs. But we did decide that we couldn't -- we took the whole seed purity piece out of here because the Sunset '17, we just couldn't give it the attention it needs. And that would be one of the things we would want to look at if we consider a future step forward on seed purity.

So, we fully intend to do that before spring. It's on our work plan already. And I hadn't heard about that particular issue before. Nor do I recall any public comment on it.

But maybe if you could point us in a
direction, we could investigate that. Then we
would be happy to for next spring.

MEMBER WALKER: Thank you, Zea.

Anyone else? Nick?

MEMBER MARAVELL: Part of my concern, Zea, is, at best, this document is a statement of
where we are. I'm afraid that it's a waystation
onto things that will just get worse.

And that's my fear.

MEMBER WALKER: Thank you, Nick.

Anyone else?

(No response.)

MEMBER WALKER: Are we ready to vote?

Madam Chair?

CHAIRMAN RICHARDSON: The vote has been
called. All of those of you in favor of the motion
to accept the Prevention Strategy Guidance for
Exclusion Methods in Crops and Handling, please
raise your hand.

(Pause.)

CHAIRMAN RICHARDSON: Anyone opposed?

(Pause.)
CHAIRMAN RICHARDSON: Any abstentions?

(Pause.)

CHAIRMAN RICHARDSON: I note one abstention. Thirteen in favor of accepting this document. Thank you, Dr. Walker.

MEMBER WALKER: Thank you, Madam Chair.

That concludes the Materials Subcommittee's report.

CHAIRMAN RICHARDSON: Very good. It is 25 minutes past 12. Could we please be back here at 1:15? 1:15 as on the schedule. 1:15, because we do have -- if you remember, we've got four items to bring forward from Tuesday. Two from Handling, two from Crops to be considered. As well as all the other materials on the agenda.

So, see you at 1:15.

(Whereupon, the above-entitled matter went off the record at 12:24 p.m. and resumed at 1:29 p.m.)

CHAIR RICHARDSON: All right. Let's get back on the record. We're exactly on time. It's 1:15 somewhere, probably in Nova Scotia or
Okay. We are moving into the last part of this NOSB meeting, and the next subcommittee to present its report is the Policy Development Subcommittee, which is chaired by Tracy Favre. Tracy?

VICE CHAIR FAVRE: Good afternoon. Hope everybody had a good lunch.

Policy Development Subcommittee, the major work task for us this past semester has been working on a comprehensive update of the Policy and Procedures Manual, or PPM. And we have made substantial changes in it, including kind of restructuring and reorganizing it based on what seemed to make a little more sense.

Public comment was pretty significant on this, and what we heard pretty consistently is everybody was having a hard time tracking what the changes were or where things had been reordered because we didn't do a track changes copy.

We actually did discuss that in Subcommittee, and Colehour in particular was the
biggest advocate for that. Our biggest problem was there were so many structural changes in where things were that there were lots and lots of red lines and markups and lots of comments and lots of the little bubbles out to the side and windows out to the side and strikethroughs in 16 different colors. And it actually got to be pretty cumbersome for us to review it that way and elected to do a cleaner copy.

Having said that, we did hear what you said and we have discussed it and we've got a plan to merge the original with the final. Don't look panicked, Emily. Tom's going to do it for us.

And we will put that out. We aren't voting on it today. It was never our intention to vote on it today. This has always been a spring plan. So you'll have another opportunity for public comment for the spring proposals and we'll resubmit it for public comment at that time.

Any comments or discussions from the Board or the Subcommittee? Is that a hand raised, Colehour?
(No response.)

MEMBER BONDERA: Okay. Thank you. And I'll start out by saying thank you, Tracy, for acknowledging that I did repeatedly bring up the fact that I anticipated outsiders reviewing it being quite impeded by not having something that showed where the clear changes had been made. But I think to sort of reiterate that, it's also not just red line of this is crossed off and this is replacing it, but I think that the other issue, having served several years, two years, as the chair of this subcommittee, and being fairly familiar with what happened before -- since Barry Flamm had been chair before, and I served on it before that -- any changes that have been made in what I would say are either our bylaws or some people -- I'm not really a religious person, so I don't really reference this personally very well, but some people resonate with it better -- our bible.

Those were documents per change so that the public could actually not just see the things, but hear the thinking behind the changes and then...
respond to those. Because when you're responding to this level of modification and subject area changes, not just reorganization but actually the meaning of many things has been significantly changed, you really are -- I'm not going to say it's impossible, because it's not impossible, but you're really impeded to actually give feedback.

And one of the things I want to take a few moments to do -- and nobody has to respond, I did this on another item earlier today -- is just to ask the members of the NOSB who are not on this subcommittee, which is the majority, if people all did have a chance to go through. Because one of my comments, the reason I'm saying this and the reason I want to do this, because one of my comments was it won't just be hard for the broader public. It will be hard within the NOSB. The other members are also going to have a hard time reviewing these changes.

And I'm just curious if non-Policy Development Subcommittee members were able to go through the entire document and see the changes and
comment, because -- and then I'll conclude, and
people can respond if they want -- because, from my
perspective, I'm going to yellow flag that we need
to be pretty careful putting forth something for the
next meeting -- I won't be here as a member of the
next meeting -- but putting forth something for the
next meeting and expecting the public comment to be
not just sufficient, but for us to be able to
incorporate into a final thing to vote on at the next
meeting.

I just want to tell you that it probably
needs to be in the form of a discussion document
that's more readable for the next meeting, and then
intending to vote at the meeting after that. That
would be my anticipation of the process, how it
realistically and honestly would allow sufficient
public input, which we're a public advisory
committee. That's who we need to make sure we have
the input from.

So, like I said, I would personally
really appreciate it if people who are not members
of the Policy Development Subcommittee, positive or
negative, would comment on the ability of reviewing
and substantially referencing the changes.

    I do have a personal comments about it,
but I'll wait on them.

    VICE CHAIR FAVRE: Does anybody want --
Mac?

    MEMBER STONE: Yeah, I was hanging on
every word. No, I did like the format. Having
been -- I guess while I was chair there was a lot
of conversation around the changes and track
changes and structural elements of it. So, in
general, I like the structure, I like the layout,
but I did not try to compare it with the previous
one. Let that committee do that work.

    But I appreciate the years of work and
it's a better document, Colehour, because of your
work on it to make it the best it can be. But I like
the structural component of it and trust that the
technicalities are correct within.

    VICE CHAIR FAVRE: Any other
discussion?

    (No response.)
VICE CHAIR FAVRE: Okay. Seeing no further discussion, this is a discussion document, not a proposal. Colehour?

MEMBER BONDERA: I'm sorry. Like I said, I did have a few other comments that I wanted to hold off on. I'm sorry. I was trying to give people plenty of time, but --

VICE CHAIR FAVRE: Okay. Go ahead.

MEMBER BONDERA: Yeah, personally, I'm not prepared at this moment to comment specifically, but I did within the subcommittee and I'm happy to again within the subcommittee.

I personally have -- I don't disagree actually with what Mac said at all, frankly, that the structure and presentation is hypothetically -- well, not hypothetically -- is much more readable and better. It's the content that's my concern, not the presentation. And that's where, for me, the concern is.

It sounds like somebody like Mac is saying -- Mac said I'm just going to trust the changes, and that's all good, but I was waiting, and
I let go some of the confusions or concerns I had because of this process that we had agreed to that this would be a discussion -- or I don't even know. Is it a discussion document? It's not titled a discussion document, so I'm actually not sure. Yes, it's more presented as a report than a discussion document, according to our processes.

But so that this report would go out to the public and maybe we'd see if we got specific feedback on specific areas and then at the subcommittee level could discuss those to make the modifications. And let's be honest, we only met once a month. We didn't really have a lot of time to discuss very many of these things in very much detail. And part of the discussion was let's put this out to the public, get the feedback, and then bring these back for discussion. And so I didn't share a lot of my concerns and we didn't discuss a lot of things.

I would argue that in two areas where there's noticeable change -- and I think probably if I'm writing something it would end up being about
20 different areas -- but two that jump to my mind while we're sitting here that I want to just yellow flag. One is the whole process as presented with minority opinion. I feel like that's quite a significant change, and I really was anticipating and looking forward to public feedback on that in this document so that that could go back to the subcommittee and be more thoroughly discussed, and, from my perspective, hopefully changed from where it currently is at. And because I think, on that subject, I think it's critical for us to recognize our -- and I'm sorry I'm chewing an apple in the process. I want to get it out of my mouth, but I don't know what to do with it. I can't swallow it yet. So, no, it's okay.

Because I really think that -- you know, I mean, I don't know. I have eight sisters. There's three boys. I have been a minority all my life in that way. It depends on how you look at things. But you got to recognize that minority opinion means different things in different ways. It never meant, when I was growing up, that you're
irrelevant because you're a male. What it meant was let's figure out how to listen to everybody, to work with everybody and to recognize that even one person's opinion is as valid as everybody else's and not dismiss it because it was a supermajority or whatever.

Even if a vote is supermajority wins, you still want to get the minority's opinions, positions and rationale. And unlike what is put forth, the truth is that you can guess, but at several of our votes on several materials today and yesterday votes switched quite dramatically. Actually some of them switched completely. You don't really know where the votes are going to be until the end of the day, and so you can't decide in advance of a vote what it's going to be or that there will be a minority opinion. Maybe that ends up being everybody. And so there's a lot of difficulty with preparing a minority opinion before a vote, because who's the minority? And so I'm sure that, yeah, there might be some response to this, but that's my experience and opinion.
And I think, like I started out by saying, the National Organic Standards Board is made up -- its whole purpose is its compromised of opinions from different backgrounds, different perspectives. That's why we're together. We're talking about the same topics, but we need to make sure that we're listening to everybody and giving everybody equal floor space and equal recognition. And I think that we need to make sure that our minority opinion part of these bylaws, of this bible, do not circumvent that, because then, you know, why? Why are we all here and why are we spending our time?

And I think that I could go into more detail on that. I won't, but I think that the other area that jumps out to me -- and I'm not going to comment on it because I'm not at all prepared -- is the section on NOP-NOSB collaboration, because I think that is where the liaison-ness or the liaison relationship between the two entities -- you know, we're a public advisory committee. We're advising the Secretary of Agriculture, like Nick referred
to. We're doing it via the NOP. We need to make sure that it's extremely clear how to do that, how it's achieved, how we get there, and that everything's in place to accomplish it, because that is our responsibility.

And I just really strongly feel that that needs to be not just open for interpretation or left open, but it needs to be made clear enough that we can all follow the same -- anybody from the outside and anybody -- you know, we're going to have six new people here next year -- they can all follow the same process, that it's not made up by whoever is in the seat at the moment of responsible position. And I think that collaboration is a nice word, but it's a pretty open word.

And so I really strongly feel that those areas of what's been put forth need more work. And like I said, my list is actually much longer, but I'm not prepared to present all of those items at this time and there's not enough time scheduled. But I wanted to point out that even at the committee level we could have quite a long discussion on this.
So, thank you.

VICE CHAIR FAVRE: Thank you, Colehour.

Jean?

CHAIR RICHARDSON: Appreciate your comments, Colehour. And you are still on that subcommittee, and so hopefully many of these issues you will now be able to bring back that you haven't been able to talk about today in the interest of time.

I think that we would have got a lot more comments from the public if it hadn't been a sunset year and people were concentrating and focusing more on all the individual materials, and also the fact that it was not easy to compare one document with the other. We recognize that, but honestly our heads were spinning trying to see the comparison between the two documents, mostly because of the change in the structure of it.

But Tom here next to me is kind of brilliant and he can make these magically overlap in such a way that when we send this out in April with all the stuff from Colehour and everybody else
on the subcommittee, we will have a document for you that hopefully -- well, I hope it won't make your heads spin, but it will allow for ease in comparing the changes that we are proposing to do, which would enable you to provide us with adequate public comments so that we can finalize a really good document that reflects every section of the stakeholders that we can do within the FACA system that we work within.

So I think that this is a great step forward and we are, of course, as we've all said, really building on the legacy of Colehour when he was chair of it for those two years and he did a lot of that detailed lining-out and all that stuff that made the document so interestingly difficult to read anyway. But we'll do better and I look forward to seeing what comes out of our subcommittee next April. Thanks.

VICE CHAIR FAVRE: Any other comments? Harold?

MEMBER AUSTIN: Yeah, Colehour, you brought up in front of the full Board meeting today
that you had roughly 20 comments that you had an issue with on some of this, or points of concern. Would it be possible, since we're in full session and we don't have time to deal with this, could you in writing send that to the entire Board so that we could see exactly what your concerns are?

MEMBER BONDERA: Yeah, that's totally fine. I cannot and will not promise when, but, yes, before my term is over I will do so. And ideally before the month is over. But, again, I won't promise. But, yes.

CHAIR RICHARDSON: Alright. We've got it on the public record.

(Laughter.)

VICE CHAIR FAVRE: Now, you're in trouble.


VICE CHAIR FAVRE: Yes, excellent.

Thank you.

I would like to thank everybody for their comments. Obviously this is a legacy
document with a long history. And while we're trying to do some structural changes, certainly it's not our intent to gut the intent of the PPM. So, all comments have been appreciated.

Any other comments about the report? Jennifer?

MEMBER TAYLOR: I agree with the comments that Colehour had in regard to minority opinion. I think it's an important piece of the document that doesn't need to be minimized or marginalized or insulted away, but it's an important piece of the whole concept of any document. And I would be happy also to share information on how to strengthen that section of the manual so that it could be reflective of the importance of that role.

VICE CHAIR FAVRE: Okay. Thank you. I actually want to clarify my perspective on the minority opinion. Whether or not we handled it and fleshed it out in a way that all the Policy Committee agreed with, it was actually expanded upon, not marginalized, in the revised PPM, because the
original PPM just said minority opinions could be included with no detail.

So I think maybe I'll offer a mild objection to the characterization of that and only say that it's clear based on your two comments that we need to flesh that out in a way that you guys are more comfortable with. But we did offer more detail rather than less in the way it had been previously, in my opinion. Thank you.

Anything else?

(No audible response.)

VICE CHAIR FAVRE: Okay, Madam Chair, this concludes the presentation from the Policy Development Subcommittee.

CHAIR RICHARDSON: Thank you. The next subcommittee to report back to the whole Board is the Compliance, Accreditation and Certification Subcommittee. And I turn it over to Carmela Beck, chairperson.

MEMBER BECK: So, the Compliance, Accreditation and Certification Subcommittee has continued to work on the one topic of assessment of
soil conservation practices document over the past two months, and as lead on the topic I'll ask that Lisa provide the verbal update.

MEMBER DE LIMA: So, at the beginning of the semester it was our intent to bring a finished discussion document to this meeting, but as we got further and further into our research and the details of what our potential recommendations might be, we realized we needed a lot more time to dig in to feel confident that we were bringing to the Board recommendations that were realistic and implementable by the public. So, given the time crunch due to the sunset materials, we decided we needed to take another semester to take a closer look at those recommendations, and we'll be bringing something to the spring meeting.

MS. BECK: Are there any questions or discussion?

(No audible response.)

MS. BECK: Okay. Thank you.

CHAIR RICHARDSON: Thank you very much.

Look forward to seeing how we can move forward on
The next material that we have to work with is we're now going to -- now that we're post-sunset '17, hence our lovely t-shirts, we will now move on to our post-sunset '17 activities in two sets of subcommittees. The Handling Subcommittee and Crops Subcommittee have some proposals, some for reclassification and others for annotation, and some also on petitioned material.

And so at this point I'll turn over to the chair of the Handling Subcommittee to start that process. Tom?

MEMBER BONDERA: Point of order, Madam Chair?

CHAIR RICHARDSON: Yes, Colehour, point of order.

MEMBER BONDERA: Yes. In what was put forth by the NOP in the Federal Register, Volume 78, No. 179 on Monday, September 16th, 2013, page 56814, it states, "If the subcommittee identifies new information" -- I'm sorry. It states, quote, "If the subcommittee identifies new information that it
believes merits reconsideration of a use restriction for a substance; for example, to expand its use, further restrict its use, or correct its restrictive annotation, then a member of the subcommittee or a member of the public can file a petition to change the use of a substance through the National List process," unquote.

And I just want to be 100 percent sure that petitions that I'm unaware of have been filed, or somehow there's something being followed through some rule system that I'm unfamiliar with that's overriding the Federal Register public notification. If you could please respond.

CHAIR RICHARDSON: I don't have any -- I don't -- you're suggesting we should have had a written petition to reclassify alginic acid, for example? I'm just really not sure what you're trying to do here.

MEMBER BONDERA: What I'm trying to do is ask if we're following what's put forth in the Federal Register, as a public advisory committee, what we are required to do legally, or if there's
some other process.

CHAIR RICHARDSON: In connection with what material?

MEMBER BONDERA: Well, I didn't -- I don't -- let me look at how you have these listed because I'm not going to do it material by material. But any annotation change, for example. So if the first one is going to be an annotation change, then -- and reclassification I think, fits in there as well, frankly.

CHAIR RICHARDSON: Okay. Well, let me ask --

MEMBER BONDERA: So, petitions to reclassify or petitions for changing an annotation come from the public or within the NOSB, is what this states.

CHAIR RICHARDSON: Okay. I'm pretty sure we've done it exactly correctly, but can I ask for then some clarification from Lisa, maybe. Dr. Brines, you want to try to help me with this? Our goal here, as you understand, is to take the two proposals for reclassification, one of alginic
acid, one of carnauba, and discuss those two first. We moved them from, whenever it was, Tuesday to today so that they'd be post-sunset.

And similarly, for crops there are two proposals: an annotation change for micronutrients and an annotation change for a list for inerts. I'm assuming that those are the four materials that you're looking at for some clarification as to whether we can do what we're trying to do here.

So, Lisa, could you help me out with this, please?

DR. BRINES: Sure, just to clarify. So, Colehour is correct that there were not petitions submitted for reclassification of alginic acid or for the reclassification of carnauba wax. However, in the course of review, the Board did identify information that they wanted to add these two particular materials to the work agenda for the subcommittee and bring that information forward to the Board for consideration separate from the sunset process.

There is the option, for example, if an
individual Board member had identified information that they thought warranted reconsideration, they could on their own submit a petition, and that would be fully compliant with the updated sunset review process.

In this case, the committee, the subcommittee, had determined that they wanted to bring that agenda item forward, and it was formally added to the work agenda for the committee.

CHAIR RICHARDSON: So, just to clarify on your point of order, we did go through the normal procedure of it going to be added to the work agenda by going from the subcommittee to the Executive Committee and with approval to put them on the work agenda in the form that you see now before you. And we did have a discussion on the Executive Subcommittee in regards to doing proposals or petitions. In fact, we had several conversations on this. And since you typically sit in on the Executive, I'm sure you recall those. So I don't see any issue with what we're doing here today.

So I would like to move, then, to Tom to
start the process of dealing with the proposal for reclassification of alginic acid and the other materials on handling.

MEMBER CHAPMAN: The first item is the proposal for the reclassification of alginic acid, and I will hand it over to Tracy to discuss this item.

VICE CHAIR FAVRE: Yes, thank you. In the course of doing our research and due diligence on alginic acid and looking at the draft classification of materials document that has come from the Program, I went back to the Handling Subcommittee with the suggestion that despite the fact alginic acid seems to be a naturally-occurring acid, in its practical form as it's used in organic production, it does undergo a chemical change in order to get there. And more typically, especially with the new classification document, would be considered a synthetic.

And so therefore, after discussion in the subcommittee, we elected to put forward a proposal for reclassification of alginic acid from
MEMBER CHAPMAN: Thank you. Any further discussion of this item?

(No audible response.)

MEMBER CHAPMAN: Did we get any public comment on this item?

VICE CHAIR FAVRE: Yeah, I'm sorry. We did receive some public comment in regards to this material, and generally all comment was in favor and in agreement with our assessment for its classification to 205.605(b).

MEMBER CHAPMAN: Thank you. Any further discussion on this item?

(No audible response.)

MEMBER CHAPMAN: Seeing none, we'll proceed to a vote. Michelle, can you switch back to the proposal and scroll to the end?

Alright. So, the motion comes from the subcommittee, the motion to reclassify alginic acid from 205.605(a) to 205.605(b) of the National List. The motion was made by Tracy and seconded by Lisa, and it was unanimously approved. One member was
absent.

We'll proceed to a vote at this time.

All those in favor of this motion to reclassify, raise your hand.

(Pause.)

MEMBER CHAPMAN: All those opposed?

(Pause.)

MEMBER CHAPMAN: Abstentions?

(Pause.)

VICE CHAIR FAVRE: The vote was 13 yes, 0 no, 1 abstention. The motion passes.

MEMBER CHAPMAN: Thank you. The next proposal is the reclassification of carnauba wax. Zea?

MEMBER SONNABEND: Thank you. Well, as we already discussed in the sunset of carnauba wax, this was originally reviewed by the Crops Subcommittee -- well, it was Committee at the time -- to be added to the National List, and a vote was never taken on whether this was agricultural or non-agricultural. And this motion is the intention to correct that past not doing -- I won't
call it wrongdoing, because it was the way of the time -- but correct the past procedure by voting that it's agricultural and moving it to 606.

It should be noted that we did indicate our intent to do this in the first posting and specifically asked public stakeholders if this would affect them in any way and if they supported that. We heard back only support for the change and no resistance to the change. And for this posting I didn't see any specific input on exactly just this change, but the same supporters of renewing carnauba on the list supported changing the section.

MEMBER CHAPMAN: Thank you. Any further discussion on this item?

(No audible response.)

MEMBER CHAPMAN: Seeing now, we'll proceed to a vote. I will read the motion. It's a motion to reclassify -- or classify. There's no "re-" because it was never classified in the first place. A motion to classify carnauba wax as agricultural and move its listing to 205.606. The
motion was by Zea. It was seconded by Tracy. It came unanimous from subcommittee with one member absent.

All those in favor of the motion to classify carnauba wax as agricultural, raise your hand now.

(Pause.)

MEMBER CHAPMAN: All those opposed?

(Pause.)

MEMBER CHAPMAN: All those abstaining?

(Pause.)

VICE CHAIR FAVRE: The vote was 12 yes, 1 no, 1 abstention. The motion passes.

MEMBER CHAPMAN: The next item on the agenda is the petition to proposal of sodium lactate and potassium lactate. Harold?

DR. BRINES: Excuse me, Chair?

MEMBER CHAPMAN: Yes?

DR. BRINES: Would you like me to do the petition introduction for this one?

MEMBER CHAPMAN: Sure. Dr. Brines.

DR. BRINES: Thank you. Alright. The
petition for sodium lactate and potassium lactate was submitted by Applegate Farms on January 5th, 2004. The petition requests the addition of these materials to Section 205.605 of the National List. The reason for the delay and why this petition is coming before the subcommittee now is in response to a memo from the National Organic Program to the National Organic Standards Board dated January 25th, 2014. In support of its review, the subcommittee did request the development of a third party technical evaluation report. And that report, the NOP memo to the Board, and the original petition were all posted for the public on the NOP website. Thank you.

MEMBER CHAPMAN: Thank you, Dr. Brines.

Harold?

MEMBER AUSTIN: Okay. On January 22nd the NOP notified the petitioner that the petition would not be necessary since the materials --

(Technical difficulties.)

MEMBER CHAPMAN: Try again, Harold.

MEMBER AUSTIN: I'm getting feedback
from it.

  (Pause.)

MEMBER AUSTIN: Still getting feedback on that.

MEMBER CHAPMAN: Yeah, I will give the introduction on Harold's behalf. So, the public comments on this material. One was from a material review organization that supports the listings but requested that we look at sodium acetate and the ancillary substance which the TR states may sometimes be used. One certifier commented that they had five operations they work with currently using these products. Crops supported its listing. CCOF supported its listing. One manufacturer supports, three processors all supported it. One trade association survey said the results were inconclusive.

On the October 20th webinar for oral testimony, there was one commenter who also provided written comments asking that it be continued for use since it has already been allowed since the 2004 NOP decision. They say that for the
past five years sodium lactate has been an integral part of their organic herb pastes. They have tried other materials, but so far sodium lactate provides the functional part of what they need and asked for it to be allowed not only for antimicrobial control, but also as a pH regulator.

Several commenters who are in favor of the listing of these two materials stated that based on the 2004 decision these materials are already currently allowed for use in organic processing. This would simply help to remove confusion and make it easier for certifiers and handlers alike. It would keep it consistent with other acid salts that are currently allowed on their own listings.

One certifier stated that sodium lactate is currently being used by five other clients in accordance with the 2004 memo for its used in processed meats, sausages, meatballs and in organic meat flavors like chicken flavor and beef flavor. No clients are using potassium lactate.

An organic farmer-owned co-op stated that they currently do not use these products and
they may want them in the future as an ingredient
to help control pathogens and other spoilage
organisms, thus they support the added materials to
the list.

There were five comments against adding
these materials to the list from interest groups and
a retailer. And the theme for these against
listings for the materials say that petitioned use
was as a preservative and other uses not petitioned,
including flavor and color enhancement, that these
intended purposes are not allowed in organic
processing. One commenter stated that the product
label that they researched did not show these
materials, therefore they didn't think they were
essential since some make their goods without them.

Harold, as the lead, had discussed
bringing this back to the subcommittee to
incorporate these comments and to bring a further
proposal forward. There were also some requests
for an annotation change to limit its use in either
meat products or as an antimicrobial control.

MEMBER AUSTIN: Yeah, it would be my
recommendation to refer this back to the subcommittee based off of the public comment that we've received. I think we don't know yet about the total usage of the material. The ancillaries are being brought into concern. Plus, it looks like these materials are being used in a manner that was different from what the original petition was. So, I think in all fairness to the stakeholders and the material, we should bring it back for further review and then bring it back for a full Board vote and review in the spring.

MEMBER CHAPMAN: Yeah. And I just want to add in that the subcommittee was generally favorable of these petitioned items, but at the time, because of the gap in time from the 2004 petition, we were unsure of its usage in the industry and wanted to make sure it was needed. And I do think the comments from the public showed that, at least from my perspective.

Before we make any motions, though, we'll open it for discussion. I think Francis had a point.
MEMBER THICKE: Something you might want to consider, the third paragraph under "History," the last sentence says, "Sodium and potassium lactate can replace nitrates, nitrites in meat products that are generally recognized as safe." And you may remember when we had the expert here I asked that and she point-blank said, no, it could not replace nitrates. So, you might consider that.

MEMBER CHAPMAN: Thank you.

Yes, so there is a motion on the floor, so we will need a different motion to send it back to the committee. Motion to table to the committee, to the subcommittee? Is that correct?

MEMBER AUSTIN: I think we can just refer it back since we haven't brought it forward for a vote yet.

MEMBER CHAPMAN: So if there's no objections, we'll just move to refer this back to subcommittee. Is there any objections at this time?

(No audible response.)
MEMBER CHAPMAN: Seeing none, it's referred back to subcommittee.

Alright. Next is the proposal for flavors petitions. Dr. Brines?

DR. BRINES: Thank you. The petition to amend the annotation for flavors was submitted by the Organic Trade Association on January 27th, 2015. The petition requests an amendment to the current listing for flavors on Section 205.605(a) of the National List. The current annotation reads as follows: "Flavors. Non-synthetic sources only and must not be produced using synthetic solvents in carrier systems or any artificial preservative." Thanks.

MEMBER CHAPMAN: Thank you. I'm not going to go into the history of the flavors on the National List here, but it is outlined in the proposal. I should note that natural flavors are listed under the non-synthetic allowance 205.605(a) list, however, today, natural flavors that meet the FDA definition and meet the annotation are allowed in organic production, and those
include natural flavors that are both agricultural and non-agricultural.

The 2010 sunset review of flavors recommended that future NOSBs do not renew the category as a whole. As this proposal is focusing on revising the annotation, I am not including a review of the OFPA criteria here.

Comments received were from a wide spectrum and were generally in support of the annotation. A few comments received noted that it took 20 years to further restrict flavors via this proposal and therefore an expiration date on the listing should be proposed to further push change more rapidly.

Another commenter noted making flavor companies do a commercial availability search on conventional flavor constituents of an organic natural flavor may not be sound and sensible. However, I want to note that that was intended by the subcommittee and we do think it is sound and sensible. Commercial availability at the flavor sub-component level will most likely be easier than
at the consumer product level. For example, we believe it is easier for a certifier to determine if organic strawberries are available than to make an organic strawberry flavor determination when it's being formulated into a finished product.

Other commenters noted the need for USDA action on the previous NOSB recommendations on commercial availability.

The goal of this proposal is to further the usage of organic flavors while not negatively disrupting business. The subcommittee's opinion is that this is just the first step and that future NOSBs should continue the push on industry in the development and adoption of organic flavors along the lines originally envisioned in 1995.

The proposed annotation is to revise the flavors annotation to read, "Non-synthetic flavors may be used when organic flavors are not commercially available. All flavors must be derived from organic and non-synthetic sources only and must not be produced using synthetic solvents and carrier systems or any artificial..."
preservative."

The motion was made by myself and seconded by Jean and comes unanimously recommended by the subcommittee.

I'll open up for discussion at this time.

(No audible response.)

MEMBER CHAPMAN: Seeing none, we'll move to a vote on the petition. Again, it's a motion to revise the flavor annotation to read, "Non-synthetic flavors may be used when organic flavors are not commercially available. All flavors must be derived from organic and non-synthetic sources only and must not be produced using synthetic solvents and carrier systems or any artificial preservative."

All those in favor of this motion, raise your hand.

(Pause.)

MEMBER CHAPMAN: All those opposed?

(Pause.)

MEMBER CHAPMAN: Abstentions?
(Pause.)

VICE CHAIR FAVRE: The vote was 14 yes, zero no. The motion passes.

MEMBER CHAPMAN: The next proposal is for ancillary substances, microorganisms including dairy cultures. Dr. Brines, do you have a reading here? Okay. Zea?

MEMBER SONNABEND: Thank you. My comments right now are addressed to all three ancillary substance proposals, because most of the public comments were addressed towards all three of them, rather than one or the other.

Let's see. We've been working on doing this for some time. The main concerns about what we have done so far come either from the certifiers who feel that it's too cumbersome and hard for them to enforce and involves paperwork that goes beyond sound and sensible. And public interest groups and some individuals who feel that either there needs to be more restrictions on them or they should be put on the National List one by one, which is contrary to what our 2013 recommendation said.
So, let me just say at the outset we're not putting them on the National List one by one. You can keep complaining and we are happy to send this back to committee indefinitely, but that is never going to happen unless one of you in the audience in the next 2 hours and 45 minutes applies for the open seat. And if you get it, you can work on it.

Nonetheless, we are trying to be responsive to the public comments that we received besides that one. And some of you seem to think that formaldehyde would be allowed as an ancillary substance when we don't even think it's allowed in food, but it is pretty clear we need to at least put some reference in there to what commonly would not be allowed. So, some reference lists like cancer-causing agents and other food additives of concern, so that if we're going to put we can allow this whole group of things, that we make it clear that the really bad actors would not be allowed.

And then we heard from some certifiers that our categorization this way would cause to be
allowed some specific substances that they currently don't allow. And so rather than making this tighter, it would actually make it looser, and that's not our intention of what to do.

On the other hand, people don't think it's sound and sensible to not have a mechanism to add to these ancillary substances, even though now on microorganisms we've had three postings asking for additional ones and no one has submitted additional ones the last two postings. So we just don't necessarily think there are that many of them out there. And for pectin, all of our research didn't lead us to think there were that many more out there.

And we were asked by certifiers to define functional classes or come up with a place where the FDA defines functional classes. And while the FDA lists functional classes, we've been operating this out of a list Emily provided to us of which ones they recognize, but we don't think there are definitions in that list. And so we're going to suggest -- I don't -- is it tabling or
withdrawing? Sending back to subcommittee?

MEMBER CHAPMAN: Refer back to subcommittee.

MEMBER SONNABEND: Refer back to subcommittee on all three of these so we can put the restrictive language that people want next in and try some more. However, I'm happy to keep tabling these as long as you'd like, but when my term is up, as I said, I hope one of our new appointees volunteers if they really want to delve into this detail. I think there are a lot more important things we could be doing with our time.

So, with that said, I recommend referring the three ancillary substance proposals back to subcommittee.

MEMBER CHAPMAN: Thank you. Before we proceed with that referral is there any further discussion on this item?

(No audible response.)

MEMBER CHAPMAN: Seeing none, we'll refer back to subcommittee. Unless there's an objection, the proposal for ancillary substances
for microorganisms including dairy cultures, the proposal for ancillary substances for pectin, and the proposal for ancillary substances for yeast.

Seeing no objection, those are referred back to the subcommittee.

Madam Chair, I hand the chairship back over. This concludes the Handling Subcommittee's portion of the agenda.

CHAIR RICHARDSON: Thank you. The next item on our agenda is to move to the Crops Subcommittee to address two annotation changes and four proposals. Zea?

MEMBER SONNABEND: Just one moment while I pull this up. I have to shift here. Which one are we doing first?

CHAIR RICHARDSON: Your annotation changes.

MEMBER SONNABEND: Okay.

Micronutrients?

CHAIR RICHARDSON: Micronutrients, yes.

MEMBER SONNABEND: Okay. We took a
look at the annotation for micronutrients. And in the first posting of this sunset review, in the spring, we did receive considerable input from users and certifiers that the micronutrients restriction was out of date and not so much in tune with growers' needs or certifiers' verification needs and needed to be more flexible.

So, we decided that the fewer words we had to change in the annotation, the better. And so we proposed a very simple annotation change to change it from "soil deficiency must be documented by testing" to "deficiency must be documented." This would allow for other well-accepted ways of documenting it. These include tissue testing, regional deficiencies that are well known by cooperative extension agents or regional publications, professional crop advisors and agronomists and other professionals accepted by the organic community.

Now, the comments that we heard back were that they wanted us to say site-specific in the recommendation, in the annotation. I happen to
think that part of documenting it is showing site-specificity, and so that doesn't really need to be said. It's imbedded in there, and that's exactly what any ACA would take into consideration when they're looking at deficiencies. You look at was it a sandy soil, a clay soil, the organic matter content. Is the region known to have a copper deficiency, a zinc deficiency, et cetera?

Certainly, that's what happens in my area. And in general the micronutrients themselves are expensive enough and hard to deal with enough that over-application is generally not likely to occur. And so you really try to fine-tune your micronutrients applications to those that are the most needed by your crop and your site-specific situation.

Another thing we heard is that people should have a plan to correct the nitrogen deficiency. To me, this is already like what the OSP is about, and the core parts of organic farming are you put in your plan how you're going to operate your system and try to prevent problems before they
happen and correct problems that already are happening. So, I don't feel like this needs to be a separate clause in the annotation. And as we all know, the Department likes us to keep the annotations as simple as possible and rely on the other portions of the rule to describe the overall procedures that happen around the specific material use.

So, we heard a lot of support for this proposal and public comment, also. And so I'm ready to move forward with it. I am interested in hearing discussion from other members of the Board. Francis?

MEMBER THICKE: Well, I guess these comments that we got kind of caught my attention because there are out there in the real world a lot of soil consultants who also sell fertilizers, and so they kind of have a routine process of trying to get you to buy fertilizer. And so a little more annotation to say it has to be site-specific and it needs a plan to correct it in the future can't hurt. Now, with this they'll send it back, though, if we
changed it? Correct?

MEMBER SONNABEND: Well, yes, if we change it, it has to send it back. But I want specific language, because putting on my inspector hat for a minute, if I ever go to a farm and see that a fertilizer salesman is the only one supplying them with their information for what they should use, I'm not going to put that in my report as meeting the annotation that exists now.

This is why we use the word "professional" in the text, because one single -- and believe me, I've seen this many times where they're relying on the fertilizer salesman for all their advice. And sometimes they've never met anyone who's organic besides the fertilizer salesman. And that does not constitute sufficient documentation. So, they need independent documentation. And, you know, maybe independent documentation should be a word. But if you want to take it back to committee, you need to think of what word.

MEMBER THICKE: Well, I think one of the
wording that came through a number of times said deficiency must be documented through verifiable site-specific methods and accompanied with a plan for future correction of deficiency. Sounds like it captures it pretty well.

MEMBER SONNABEND: To me, that doesn't say anything about fertilizer salesmen. It only said the things that I just mentioned about, you know, yes, I have sandy soil or the site-specific things. It doesn't say who's telling them those site-specific things.

MEMBER THICKE: You're right, it doesn't tell that, but it does put a little more guidance in. You certainly have seen the salesmen. I mean, I've seen a whole book written by a very famous national soil consultant who doesn't have a stitch of data in it to support any of what he does, but people all across the country, not site-specific at all, follow it and sell based upon that book.

MEMBER SONNABEND: Other comments?

Harold?
MEMBER AUSTIN: When we go through our certification and our annual review, we have to provide either a soil analysis, leaf analysis, fruitlet analysis, field scattering report documenting exactly what it is that we're seeing is deficient and why we're putting it on. We can also include visual notes that we've seen deficiencies, you know, the symptomology within the plant or the tissue itself, but that all has to be documented.

And when we go through our annual review, we're held to that accountability pretty rigorously. So, I don't think we're that far skewed, to be honest. I think this is a good annotation and helps match up. Because it's going to vary from site to site and geographic area to geographic area how this gets performed.

MEMBER SONNABEND: Anyone else? Nick?

MEMBER MARAVELL: Well, in the interest of sounding sensible, maybe, if you get down to this at a site-specific level -- and it has to be by crop as well -- these are not like black and white, like, oh, there it is, we got a deficiency. These are
judgment calls. I don't know how much more specific we can get, and I'm thinking about what I see there is probably about as good as you're going to get.

MEMBER SONNABEND: Yeah, and in fact, limiting to soil documentation of soil testing has so many limitations because it can vary so much from the time of year, from crop to crop, what amendments you put on, how recently, were there availability or not at that particular time. And so it's just more flexibility is needed because this doesn't exactly tell the whole story.

Harold?

MEMBER AUSTIN: Well, I think that also brings to the point the variations in testing itself, Zea, because whether you're pulling a standard bioassay soil analysis or you're doing a paste extraction, you may get two different results. And what I see showing deficient in a soil may be completely different when I run a fruitlet analysis, what that gives me back.

So, there's a lot of different variables
and I think we can't get too descriptive on this and block us into too tight of a corner. Because each grower, farm and each crop working with their field advisory consultant, they know what they're doing out there. I mean, this is their livelihood.

I mean, I think this is good. It's a good direction. It's an improvement from where we were, but I agree with Nick, I don't think we can take and get much more specific than what we already are doing with this proposed annotation.

MEMBER THICKE: I'm willing to go along with you guys. But I thought it was good to have this discussion, though.

MEMBER SONNABEND: Oh, it is good to have this discussion because it lets both community members and the certifiers in the audience know what we expect from them, because we would expect that everyone's inspection was as vigorous as Harold's and mine and other inspectors in the room might conduct on a farm.

MEMBER THICKE: I'd like to make one last comment, though. A lot of what soil
consultants do is not based on data. It's just they're shooting from the hip.

MEMBER SONNABEND: Well, I know. That's why you have to be careful and be careful as an inspector and make sure that you're looking at something that actually is variable. But, you know, UC has publications today on growing organic apples, growing organic blueberries, growing organic whatever. And you can go to those publications and it will talk a lot of times about regional needs for micronutrients. And so that's a verifiable extension publication that would back up either your test results or back up what your consultant told you, for instance.

Nick?

MEMBER MARAVELL: Yes, I'd like to share Francis' skepticism there, but we really can't help save people from themselves through the regulations. I mean, at a certain point you're going to have to let people make their own decisions. And you shouldn't be spending money -- and that's one way to look at this -- farmers
generally won't spend money unless they're really convinced that they need. Although, we've seen that not to be the case sometimes.

MEMBER SONNABEND: This doesn't get you out of spending money because you're either testing or you're paying a consultant to tell you what to do.

Jean?

CHAIR RICHARDSON: Yeah, as an inspector I really like the way you've got the annotation worded. It gives the right kind of flexibility, boots on the ground when you go to a farm. It's nice to be able to see, well, how did you decide you needed that extra? And it's often not from a soil test. It's from your visual observations over time. So, it's good.

MEMBER SONNABEND: Okay. I guess we're ready to vote. Am I calling the vote or one of you -- are you guys --

CHAIR RICHARDSON: Call for the vote on the proposed annotation change on micronutrients.

All those in favor of the proposed annotation change
as written and presented, raise your hand.

(Pause.)

CHAIR RICHARDSON: Those opposed, raise your hand?

(Pause.)

CHAIR RICHARDSON: Any abstentions?

(Pause.)

VICE CHAIR FAVRE: That was 12 yes, 1 no, 1 abstention. The motion passes.

MEMBER SONNABEND: Okay. Next is an annotation change for EPA List 4 inerts.

Well, we mentioned some of this the other day, but I will go over it again. It's been quite some time now since the EPA asked the NOP to remove the reference to EPA List 4 because EPA List 4 is no longer in use by the EPA. At which time, the Inerts Working Group was -- well, not quite at that time, but eventually the Inerts Working Group was formed and undertook to survey how many inerts were in use in organic products at the time -- which is going on like what, four or five years now since that was done -- and has been working on a solution to
In the last year or so we started exploring with the EPA Safer Choice Program, formerly called Design for the Environment. And in order for this program to move forward, an annotation change needs to be approved to the National List to actually remove the EPA List 4 language and put in the working with the Safer Choice Program language.

So, after that happened, this is the first step in a long series of steps, which Emily and I together have put into this document in bullet points. Well, let's see. About half of the comments we got said we were moving too slow on this and the other half said we're moving too fast on this. And so we are trying to find the balance between the slow and the fast, which will make nobody happy, but at least it will mean something's happening.

So, the steps would include after this is voted on and hopefully passes that a Federal Register notice will come out to notify the
stakeholders of the program with procedures. And
this will also be what was called in some public
comments the call-in for new information to be
either petitioned in the way of inerts or applied
to the Safer Choice Program to have the inerts
reviewed.

The Federal Register notice will also be
followed by rulemaking to amend the National List
with the annotation change. Along with that will
come a timeline for implementation which we expect
to be three to five years so that manufacturers can
apply for consideration for the SCIL list or
petition the NOSB and/or reformulate their
products.

An MOU or other mechanism needs to be
finalized to solidify the agreement between the NOP
and the Safer Choice Program. And then the
specifics of the program need to be hammered out,
many of which were brought up as gaps in this
proposal. We realize that there are those gaps in
this proposal, but we have the interim period to
work on it instead of postponing everything for six
Then the final bullet point is to establish a procedure for the NOSB to review the SCIL list to identify those criteria in OFPA and address them that are not in the SCIL list. And we appended the comparison between the criteria to the end of the document, which show that there are not very many gaps. They're really quite similar, but there are a few. And we do want to be diligent about addressing those few gaps and we will be developing a procedure to do that.

So, some of the areas of concern that were identified by the public comment include the lack of that procedure. We've only had preliminary talks on some of these procedural items, and so we're not ready to go to that level of a proposal, but realize that, if this passes, I'm sure every six months at our NOSB meetings will be reports or updates of where we're going with periodic opportunities for public comment and review of what our procedures actually are once we develop them.

So in either six months or a year from
now we will have -- probably not to anyone's satisfaction, or most of your satisfaction -- but we will at least have transparency in what the procedures will be and future opportunities for public comment on those procedures.

So, they include things such as how we're going to address regular reporting from SCIL, which we've already asked them if they could do regular reports to the Board for each meeting, and they've said that would be no problem. What we're going to do with those reports. How things are going to look on the SCIL list when they've reviewed for organic by some sort of notation, as I mentioned to Harriet, or possibly in a separate section of separate page.

What's going to happen to those chemicals that are already on SCIL but may be used in organic products, but we're not really aware of them? And so that's kind of a loose end that has to be worked out. And also some people were concerned that the SCIL list contains active ingredients and people would think that those
active ingredients would be allowed even though they're not on the National List. And we'll make that very clear that that is not the case, because nobody thinks that is the case around here.

The formulators and others need to have a fairly specific timeline. And so, that will be a piece that we'll be working on. Of course the public wants to know, but the people who actually have a stake in this game really need to know what to do with their products. We heard lots of comment from people who are reluctant to even make new products because they're afraid of what inerts they use in them, and so it's hampering future development for more products for organic. And this is a very grave concern and one that we would like to address as soon as possible.

And we have been successful in reaching out to some of those stakeholders who have associations for formulating products and adjuvants in biopesticides, and so they're all paying attention now. And that's a major benefit, or a major positive, because it's been very hard to
reach those people in the past to get them to be aware of this.

So, we do feel that it is worthwhile to proceed, because, as I said at the outset, we're going to wait six months and not much more is going to have happened if we don't proceed. We are not going back to putting individual inerts on the National List, just like we're not going back to putting individual ancillary substances on the National List. And now you only have two-and-a-half hours to apply for that position and take over this project, if you want to do it.

So, as I said the other day, it does become a matter of trust or not. And we realize some of you don't trust us no matter what we do, and so I'm not talking to you, because you can just keep bashing us as much as you want to. But the rest of you, we are taking the concerns to heart, and if you can trust us to try and work out these details and maintain transparency as we work through it and engage public comments at the appropriate times, then we would like to move forward with this
proposal.

So, I would like to hear -- because we haven't had a chance to talk about this as a full Board, so I am interested to hear the impressions from my fellow Board members. Thank you.

MEMBER STONE: So, we need to pass this out so that then the conversation can continue and with EPA. Where are the MROs and the certifiers? Are they clear as to what they're doing while this is being -- while the agreements with EPA and the conversations -- what's the timeline of clarity for MROs and certifiers?

MEMBER SONNABEND: Well, until there's a final rule to change it, they're operating under what we're operating under right now. So, I think all the ACAs and MROs are quite clear on that. Jean?

CHAIR RICHARDSON: Yes, I'm sitting on this EPA Working Group now with Zea and we've gone through on these -- in these conversations this analysis on the comparison of review criteria that you see in Appendix 1 that's attached to this and
discussed the changing trends at EPA obviously that make this really kind of necessary. And I really strongly support this language right now so that we can keep on moving forward with this.

I think it's really important for us to give the green light. Nothing we do is really going to be perfect on this. It's a very, very complex area, but I think that this makes it much clearer and cleaner and it will allow us to keep on moving forward to assure the integrity of the organic products that we're generating.

I'm going to call on myself for one little point I forgot to mention before we keep going. OMRI made a comment that they thought 25(b) products would be included under the way this is worded. I just don't see that because the heading says synthetic inert ingredients. And so, I don't think we have to say it again down there, but we have -- the footnoted portion of this is not correct, Emily realized.

And so, we would like to insert two words that we don't feel are a substantive change into
(I), the first one, which would say, "Substances permitted for use in inerts in minimal risk products exempt from pesticide registration." And remove the footnote, right? Yes. Tracy?

VICE CHAIR FAVRE: I'd just like to add we looked at this in livestock as well, because we do have an annotation for it as well there, and felt first of all that our initial take on List 4 inerts was that it was, as I said the other day, too big an elephant to chew. And this actually gives us a means for doing something. And I think several of us have said this: it's not a perfect solution. But the checklist between what we would do as a review of the Board versus the Safer Choice review are not that dissimilar. And then we still have the option for further review within the Board. And I think we have to support this to move it forward or we're going to end up stuck with another one of these squirrelly listings that we don't know what to do with.

MEMBER SONNABEND: And one additional point I forgot to mention in things to work out is
we do plan to work on a procedure for petitioning to withdraw something that's been put on the SCIL list. Like any petition, it has to have evidence in it, but something that comes through with evidence you will be able to flag things that have been added to that list for us to do further work on.

Any other comments? Colehour?

MEMBER BONDERA: Okay. I think I have what is probably a clarification question of what's already been discussed. And my head is pretty messed up right now, so I apologize if you've already said it all.

But since the SCIL list process doesn't require a public notice and comment like adding something to the National List -- and so just to understand it, if something is there and we adopt it with whatever rationale or criteria that have been created in the future development process, then, like you just said, we could then choose afterwards to remove something. I don't know about the horse and cart issue, but it seems a little bit
concerning to me in terms of what are these items, when are we going to get a chance to review them, and when is who doing what kind of review of them in terms of making those determinations? And so, I'm not sure that it's clear or how or when we're measuring these materials against the required criteria. Thank you.

MEMBER SONNABEND: Well, I did say some of this, and the specific details are not fully worked out, but what I anticipate is we'll get a report from SCIL every six months. It will say these materials have been reviewed in the last six months. We should be able to if we want to post those with our meeting notice so that the public can be aware of what has happened every six months. And at that point people can comment as they wish on anything they feel that doesn't belong there and we can discuss those things.

Anyone else? Francis?

MEMBER THICKE: Well, I keep thinking that regardless of whether we go with the SCIL or with investigating each of the materials
individually, like with ancillary substances, this is really something that we need to have staff to do. This is not something that we can do, and we're not going to recruit somebody to come on this Board and do all that work. In any organization this is staff work or hired consultants.

We're not going to try to put it all on you, Emily.

But we can hire like technical reviewers. We need to have this -- we need to identify all these materials and have them all reviewed independently. And then we can work on that. But we can't do all that.

MEMBER SONNABEND: Francis, you're right, we can't do all that, however, neither can any amount of NOP staff because the SCIL program has access to confidential EPA information that no one in the NOP has about these inert ingredients. And the advantage with working with SCIL, one of the main advantages; and maybe we didn't make this clear enough in our report, in our posting, is that we are totally stuck because we are just guessing what
products these are used on. We don't have the resources of chemists and special panels that review different things for compatibility with sustainable principles and things like that. And they have all of that set up already. They have independent scientists, they have a review procedure, they have access to confidential information. And this is really the great advantage of working with the EPA directly. As it says in OFPA we should be doing, is working with the EPA on inert ingredients. So it is a unique opportunity in that way that I think will just end up getting the ball dropped if we don't do something like this.

MEMBER MARAVELL: Yes, I agree with Francis and with what you just said about inter-agency cooperation, and there are many ways to approach that with interagency agreements. And I would also point out that the statute authorizes the NOSB to either hire or be detailed staff as well.

MEMBER SONNABEND: Miles?

MR. McEVOY: Yes, just another point of
clarification. Yes, the statute does say that, but you have to get appropriated the funds to be able to utilize that, and you haven't been appropriated any funds. So Congress has that authority to do so, but you don't have any funds to do that.

MEMBER MARAVELL: Have any funds ever been requested?

MR. McEVOY: I do not know that.

MEMBER SONNABEND: Anyone else with feedback on this?

(No audible response.)

MEMBER SONNABEND: Okay. I think we are ready to vote.

CHAIR RICHARDSON: So we're going to vote on a long motion, and let me just refer you to your paper so you can read along with Jean. I'll read it since it is a lengthy complex motion.

The new motion that we're bringing forward, a proposed change on 205.601(m) and 205.603(e). It will read: "As synthetic inert ingredients as classified by the Environmental Protection Agency for use with non-synthetic
substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of any such substances. (1) Substances permitted for use in the inerts in minimal risk products exempt from pesticide registration under FIFRA Section 25(b). (2) Substances included on the EPA's Safer Chemical Ingredient List. (3) Inert ingredients that are exempt from the requirement of a tolerance under 40 C.F.R. 180.1122 for use only in passive pheromone dispensers. (4) Reserved for any other inerts individually petitioned or reviewed."

All those in favor of this proposed change, raise your hand?

(Pause.)

CHAIR RICHARDSON: Those opposed?

(Pause.)

CHAIR RICHARDSON: Any abstentions?

(Pause.)

VICE CHAIR FAVRE: That was 10 yes, 4 no. The motion passes.

MEMBER SONNABEND: Thank you very much.
It does mean we have more work and not less work, but --

Okay. Now, we're going to move to our petitioned materials. The first one is laminarin.

CHAIR RICHARDSON: Excuse me for the interruption. Would anyone like a 15-minute break at this point, or you want to go on? Break? Okay. We'll take a 15-minute break and come back at 10 minutes past 3:00.

(Whereupon, the above-entitled matter went off the record at 2:54 p.m. and resumed at 3:16 p.m.)

CHAIR RICHARDSON: All right, Zea is sitting down and putting on that incredibly handsome t-shirt. You should be aware of the fact that it is made of organic cotton, of course. I did get a question on this, but we wouldn't do anything else.

All right, so we will now move along on the Crops Subcommittee and take the next petitioned material proposal over to you, for Dr. Brines, I guess.
DR. BRINES: As the petition for laminarin was submitted on May 30, 2013, it was submitted by Laboratoires Goemar, S.A. The petition requests the addition of laminarin to Section 205.601 of the National Centers for Disease Control. This petition was also on the agenda for April 2014 NOSB meeting. Following the meeting, the subcommittee did request the development of a third party technical evaluation report of limited scope. That report was developed and posted on the NOP website as well as the 2014 and 2015 NOSB subcommittee proposals and the petition. Thanks.

MEMBER SONNABEND: Okay, this is material that we saw before I believe in the spring of 2014. At that time, the Board sent it back because it needed a TR on whether it was synthetic or non-synthetic. So we requested a limited scope technical review on the extraction process.

We concluded from that that as subcommittee that laminarin is non-synthetic. It has been extracted with an acid-base reaction and in the classification of materials guidance it
states that an acid-base reaction is acceptance, as long as the material has not been transformed into a different substance by chemical change or has been altered into a form that does not occur in nature and also that the synthetic materials have been removed from the final substance to the point where they have no technical or functional effect.

So while there is a very small amount of sodium silicate in the -- sodium sulfate, sorry, in the final product, it does not have a technical or functional effect. And I gave the percentages of the ions so that you can see that it is very small.

I should also say that we heard at the first when we posted it, before we heard testimony from, OMRI that they would consider -- well, back up. This product is a registered pesticide. It is a seaweed product, but it works by stimulating the plant's natural defense system to help fight off diseases. And as such, it is being reviewed similar to pesticides rather than similar to fertilizers. And in that case, the sodium sulfate would be considered an inert ingredient and is, in
fact, on List 4. And OMNI had written this to that effect as well.

So I will open it up to discussion and I was going to wait until Carmela talked about brown seaweed next so we go into the differences here. But if someone wants to bring that up, we can talk about it because I understand it might be confusing. But this product on the basis of the classification of materials guidance plus the fact that it's a registered pesticide, we have decided to propose classifying it as non-synthetic.

The floor is open. Jean.

CHAIR RICHARDSON: I know that one of the public interest groups did raise some concern that it may still be a synthetic because of the extraction method. I know you've just explained it, but could you help us to set their concerns to rest?

MEMBER SONNABEND: Some public commenters do not agree with the classification of materials guidance which is interim and not final which does accept acid-base reactions as valid
methods of extraction. I should point out that many, many of our non-synthetic materials which don't have to be on the national list, but are non-synthetic, are extracted with acid-base reactions and so there is much precedent for this, but most of those things have not been reviewed by us because it's been commonly accepted that they're non-synthetic.

MEMBER MARAVELL: My memory isn't too good on this, but the classification of materials document I heard you refer to it as interim. My recollection is we never approved it, and that's why it remained in draft. But I could be wrong, so please --

MEMBER SONNABEND: It's not up to us to approve.

MEMBER MARAVELL: Right.

MEMBER SONNABEND: It was issued by the Department as interim.

MEMBER MARAVELL: Right, but we had -- we offered guidance on it.

MEMBER SONNABEND: We offered comments
on it in 2013. It has not proceeded to final yet so we don't know if our comments were adopted, but that was not one of our comments about acid-base reactions.

MEMBER MARAVELL: No, no, no. But I seem to remember we were not in agreement as a board as to the guidance that we gave back to the Department as well.

MEMBER SONNABEND: No, we -- well, it never went to the full board. The subcommittee offered the comments and the subcommittee did vote on those comments.

MEMBER MARAVELL: Right, but the full board did not.

MEMBER SONNABEND: Right.

CHAIR RICHARDSON: Miles.

MR. McEVOY: Yes, the draft guidance that was issued 2013 was based on the NOSB recommendation on the classification of materials. So the draft guidance that was issued was based on implementing and recommendation from the board on the classification of materials. And then we
requested public comment on that and we received a number of public comments and we're in the process of finalizing that.

   MEMBER SONNABEND: Truthfully --

   MEMBER MARAVELL: There's something lost in my mind, but you might be -- I didn't know that the full board sent forward anything.

   MEMBER SONNABEND: It was before any of us were on the board, but Katrina Heinze might still be here if we needed her to clarify.

   MEMBER MARAVELL: Yes, Katrina certainly could.

   MEMBER SONNABEND: The full board did -- she wrote it and the full board did vote on a classification of materials, I think in 2010, if I'm not mistaken.

   Anyone else want to make comments about laminarin? Francis.

   MEMBER THICKE: I am just going to mention that I am going to abstain because the classification is based upon draft items which is in itself controversial.
MEMBER SONNABEND: Okay. Anyone else?

All right, I think we're ready to vote.

CHAIR RICHARDSON: We are voting on a motion to classify laminarin as petitioned as non-synthetic. All those in favor of that motion, please raise your hand.

Those opposed, raise your hand.

Those abstaining.

VICE CHAIR FAVRE: The vote was nine, yes; three, no; two abstentions. Motion fails.

I'm sorry, passes.

MEMBER SONNABEND: It passes. You're sure?

She's just checking to make sure. I think we wouldn't know what to do next if it didn't.

VICE CHAIR FAVRE: Just a little jolt of adrenalin to get everybody awake this afternoon.

MEMBER SONNABEND: So now, Carmela -- oh, brown seaweed isn't right after laminarin. Okay. We have determined that we did not need to vote on the lignin sulfonate proposal to remove -- since lignin sulfonate was removed in the sunset
vote. And so we're going to move then to the sulfuric acid proposal which would be Francis, right?

DR. BRINES: Francis, I can introduce before you start. The petition for sulfuric acid was submitted by BioAtlantis Limited on November 24, 2014. The petition requests the addition of sulfuric acid to Section 205.601 of the national list as a solubilizing agent. In support of the review, the subcommittee proposal and the original petition have been posted on the NOP website. Thank you.

MEMBER THICKE: So the petition is to take micronutrients and solubilize with sulfuric acid which the Crops Committee had concerns about because it's like -- sort of like an input substitution sort of thing, highly refining micronutrients. It's designed to spoon feed plants in ways that circumvent the natural soil building processes that's central to organic farming systems. That's all I have to say for now unless you have any questions.
MEMBER SONNABEND: Any discussion on this? Okay, we can vote.

CHAIR RICHARDSON: First is the classification motion. Move to classify sulfuric acid as petitioned as synthetic.

All those in favor of that motion please raise your hand.

Those opposed, please raise your hand.

Any abstentions?

VICE CHAIR FAVRE: The vote is 14, yes; 0, no. Motion passes.

CHAIR RICHARDSON: The listing motion is a motion to list sulfuric acid as petitioned at 205.601.

All those in favor of such a listing, please raise your hand.

All those opposed to that listing, please raise your hand.

Any abstentions?

VICE CHAIR FAVRE: The vote is 0, yes; 14, no. The motion fails.

MEMBER SONNABEND: Thank you. Last,
but not least -- yes, Harold?

MEMBER AUSTIN: Question. On the laminarin vote it was 9, yes; 3, no; 2 abstained?

VICE CHAIR FAVRE: Yes.

MEMBER AUSTIN: If I'm not mistaken, doesn't it take ten votes to pass that?

MEMBER SONNABEND: Abstentions don't count towards the proportion of two thirds.

MEMBER AUSTIN: Okay. Thank you.

MEMBER SONNABEND: Okay, moving on now to brown seaweed extracts. Lisa.

DR. BRINES: Thank you. The petition for seaweed extracts was submitted by BioAtlantis Limited on October 3, 2014. The petition requests the addition of seaweed extracts to Section 205.601 of the national list. In support of the review, the subcommittee proposal and the 2014 petition have been posted on the NOP website. Thanks.

MEMBER SONNABEND: Carmela.

MEMBER BECK: As Lisa said, the Crops Subcommittee received a petition from BioAtlantis Limited for brown seaweed extract in early 2015 for
use as a plant strengthener or fertilizer used to improve shoot growth and seed germination. Although described as a plant strengthener, the two products were labeled as a 0-0-3 fertilizer and a 0-0-1 fertilizer.

Material use is through foliar applications or fertigation. There's a three step manufacturing process whereby seaweed is harvested and extracted with tap water. The pH is lowered to a 3.5 minimum by adding a low concentration of sulfuric acid. The mixture is then centrifuged to separate seaweed insoluble from liquid extract and potassium hydroxide is added to adjust the pH of the liquid extract to near neutral.

Similar to laminarin, both are seaweed extracts. Both use sulfuric acid and potassium hydroxide for extraction. However, in this instance, the subcommittee determined that the brown seaweed extract material should be classified as synthetic per the draft guidance and classification of materials. Because the fertilizer use of brown seaweed that's on the
national list is an aquatic product only allows potassium hydroxide, but not sulfuric acid.

This addition of sulfuric acid has a functional effect in the final product. Because OFPA prohibits the use of any fertilizers containing synthetic ingredients, and we don't wish to add sulfuric acid to the list for this purpose, brown seaweed as petitioned cannot be added to the national list.

MEMBER SONNABEND: I can call on myself. I think it is important to add because it could be confusing if we vote this down to have people think that all brown seaweed wouldn't be allowed. But that's why we have the words in there "brown seaweed as petitioned" because this is the brown seaweed that is formulated with sulfuric acid as an extracted. And there are plenty of other brown seaweeds that do meet our aquatic plant restrictions and therefore, those are still allowed. But this particular one is not, would not, once we vote.

So is everyone clear on the difference
between this an laminarin and the difference in regulations?

I'm not seeing anyone shake their head no, so that's good. Does anyone have any discussion points? All right, I believe we can vote on this.

CHAIR RICHARDSON: There are two motions. The first motion is the classification motion. There is a motion to classify brown seaweed extract as petitioned as synthetic.

All in favor of that motion, please raise your hand.

All those opposed, please raise your hand.

Abstentions?

VICE CHAIR FAVRE: The vote is 14, yes; 0, no. The motion passes.

CHAIR RICHARDSON: The second motion in connection with this petition is a listing motion. The motion is to add seaweed extract as the word brown is not in there. I will read it into the record though. "The motion is to add brown seaweed
extract as petitioned at 205.601."

All those in favor of this motion to add this to the national list, please raise your hand.

MEMBER CHAPMAN: Madam Chair, I request a roll call vote, please.

CHAIR RICHARDSON: The motion has been made to do a roll call vote, so we will do that. We'll start with -- I think we're up to Colehour. Sorry, Tom.

MR. CHAPMAN: No.

CHAIR RICHARDSON: Tracy.

VICE CHAIR FAVRE: No.

MEMBER SWAFFAR: No.

MEMBER BECK: No.

MEMBER TAYLOR: No.

MEMBER MARAVELL: No.

MEMBER THICKE: No.

MEMBER AUSTIN: No.

MEMBER SONNABEND: No.

MEMBER STONE: No.

MEMBER WALKER: No, ma'am.

MEMBER DE LIMA: No.
MEMBER BONDERA: No.

CHAIR RICHARDSON: The chair votes no.

Harold, do you want me to speak for you?

MEMBER AUSTIN: No.

CHAIR RICHARDSON: Thank you.

MEMBER AUSTIN: Take that either way.

(Laughter.)

VICE CHAIR FAVRE: The vote was 0, yes; 14, no. The motion fails.

MEMBER SONNABEND: This concludes the Crops Subcommittee portion of the agenda. Thank you.

CHAIR RICHARDSON: So then now we move into the election of the NOSB officers at this point. And so I'll give you a few minutes to think what you want to do and if you're really willing to step forward, you should know that I am not in the running, so I'm going to take a break and sit there and smile all next to you on this side down there where Zea is so I can just smile.

So are we ready for officer elections?

I would entertain -- I know we can do it informally
or formally, but we might as well do a motion to put someone's name forward with a second. Is there a motion for the highly respectable and much desired position of chair of the NOSB? Is there a motion? I see one. Calvin.

MEMBER WALKER: Madam Chair, I would like to make a motion to nominate this particular person who has served on the Handling Committee, chair of the Policy Committee, chair of the Livestock Committee, currently the vice chair and I recommend her to serve as the next NOSB chair.

MEMBER AUSTIN: I will second that.

CHAIR RICHARDSON: Second by Harold, motion by Calvin. He said Tracy. Oh, he didn't?

MEMBER WALKER: Tracy Favre.

CHAIR RICHARDSON: All right, we have a name. Tracy Favre. Just checking to make sure everyone is listening.

Are there any other nominations for chair or anyone who would like to self-nominate themselves for this position, because we are allowed to do either of those.
Seeing none, the chair, unless there is any objections for anyone around this table or out there on the West Coast, the chair would declare by acclamation that Tracy Favre gets this terrific job of being the next chair of the NOSB. And she's looking quite embarrassed, but she'll do just fine. Do you want me to finish the rest of the vote?

All right, so the next one -- are there any nominations for the vice chair of the NOSB? Oh, that's me. I would like to nominate, if I may, I would like to nominate Tom Chapman. I've noticed that he has the excellent ability to work with two computers. He uses absolutely no paper at these meetings and he's apparently capable of merging both of the old PPM and the new one all into one document. And so therefore, I get to nominate him as the vice chair of the NOSB.

Is there a second?

MEMBER TAYLOR: I second.

CHAIR RICHARDSON: Seconded by a couple of people. Looks like --
MEMBER TAYLOR: Jennifer Taylor.

CHAIR RICHARDSON: Jennifer. Thank you. Are there any other people that would like to self-nominate for this illustrious task assuming you have all the right computer skills? Seeing none and --

MR. CHAPMAN: I have a question.

CHAIR RICHARDSON: Sorry, you're not allowed one right now. You can have one later. He can refuse a nomination, but he's not going to and his questions can come in a little bit, in a minute or two.

The chair declares by acclamation and without objection to all persons around this board and on the West Coast that Tom Chapman is the next vice chair of the NOSB.

Now you can say something very briefly.

MR. CHAPMAN: I just wanted to know if it came with a raise.

CHAIR RICHARDSON: Yes, yes, yes, it does. It's double what it was for the last vice chair.
The third person as an officer is that of secretary. The secretary is the person that keeps track of a wide range of things on the board, helps with the voting, and looks at the report of this committee in order to approve that at the meeting and is active on the Executive Committee and on the Administrative Committee as well.

Are there any nominations for this job? Jennifer?

MEMBER TAYLOR: Thank you. I would like to nominate Lisa de Lima.

CHAIR RICHARDSON: Jennifer nominates Lisa de Lima for secretary. Is there a second?

MEMBER SWAFFAR: Second.

CHAIR RICHARDSON: Second by Ashley. Are there any people that would like to nominate themselves up for this job? Seeing none, I will state by acclamation we will elect Lisa to the position of secretary at this time. Thank you, Lisa.

So therefore, now I turn it over to Tracy at this point. She doesn't realize that, but now
she has to run through the subcommittee work agendas that Michelle is going to put up. And I am going to pass on to her my magic wand which will bring her all kinds of luck. She's going to need it.

CHAIR FAVRE: Can we have laser sights mounted to this thing? Thank you. I appreciate the votes of support and confidence that you've shown in my ability, however misplaced it might be.

Okay, running through our work agenda for next year. First up is the CACS and -- all right, so we'll turn this over to Carmela for CACS to talk about the work agenda.

MEMBER BECK: Well, as you can see right there, we are still working on the assessment of self conservation practices and we'll determine whether or not there will be more tasks for us come '16. Thank you.

CHAIR FAVRE: Any questions for Carmela? Okay, next up is crops. Zea?

MEMBER SONNABEND: Thank you. I guess you're able to look at what we have. There are quite a few petitions that are in the wings.
Anaerobic digestate, I guess was just withdrawn between posting and this meeting. We had commissioned a TR on some of the broader issues about this subject, not just the exact item that was petitioned, so we will discuss in subcommittee whether to proceed, and have the TR and take this up as a project rather than a petition. That is yet to be determined.

There has been a petition for an ash from manure burning to not to allow a certain form of it which would mean adding an annotation to 205.602(a). That will be coming forward in the spring.

There's a petition for squid and squid byproducts.

Aluminum sulfate is the main petition. It lies in Livestock and it came to us because I believe it's fused in bedding and then the bedding might be composted or -- it ends up on fields somehow. I haven't read it, sorry. But it ends up on fields, so after Livestock reviews it, we will take a look at that one.
And then hypochlorous or electrolyzed water is on here because as a chlorine material it affects all three subcommittees.

Other projects include contamination issues in farm inputs which we will need a volunteer to step forward to keep working on it since Colehour is leaving the board.

Biodegradable/biobased mulch which, as you all know, the Department asked us to take another look at that and so we will be doing so next semester.

And it doesn't say this, but there will still be inert issues to report on at the next meeting. Hopefully, we'll have a progress report, some more of the procedures fleshed out. And we are proposing a discussion document to prohibit -- to move towards prohibiting NPEs which we know will not make it through the skill process.

Then Sunset 2018 is pretty self-explanatory there. And then a few things have been referred back her today which I'm assuming will be able to be on our work agenda. A few additional
suggestions for annotation changes for the committee to look at and things that came up in discussion. So we'll be taking a look at those and possibly adding them, requesting them to be added to our work agenda. So that's it.

CHAIR FAVRE: Thank you, Zea. Next up is Handling. Tom?

MR. CHAPMAN: We have two petitions before us, one beta-glucan and hypochlorous acid. In addition to that, we have four other projects, BPA in packaging and xanthan gum reclassification of which we requested TR; tocopherols reclassification and nutrients, vitamins, and minerals annotation change.

We've also requested to the program that phosphate -- I've done that. Annotation change for phosphates be added to the work agenda. That's good. That's been added.

In addition to that, there's Sunset 2018 and those substances are listed there and similar to what Zea mentioned, we will also be in the subcommittee considering the items discussed
during the Handling 2017 sunsets for requests to be added to the work agenda as well.

    CHAIR FAVRE: Thank you, Tom. For Livestock, we've got some new petition materials including aluminum sulfate which is a poultry litter supplement. That's the one they referred to earlier. Basically, once it's removed from the poultry house, it could be composted and put on fields, so it crosses both of those subcommittee jurisdictions.

    Next one is sodium bisulfate and bentonite acid activated. All three of those are poultry litter materials.

    And then we have the lovely and long-anticipated aquaculture materials which are currently still housed in Livestock and we'll be looking at those depending upon when the aquaculture standards come out.

    And then we also have some petitions, or a petition, I should say, for hypochlorous acid and then we have annotation changes for lidocaine, procaine, and the annotation change for
parasiticide. I should also comment that we've had a couple that have come up here during the meeting today which I'm sure that's also true for the other. I know, at least, there was at least a couple for Handling and we'll be adding those to our work plan as we go forward with after discussion with the Executive Committee.

Francis?

MEMBER THICKE: Question. The hypochlorous acid is that like electrolyzed water? Okay.

CHAIR FAVRE: Miles?

MR. McEVOY: Yes, and the program will be asking the Livestock Subcommittee to take a look at antibiotic use in day-old chicks. So that will be coming along in a memo to the board early next month.

CHAIR FAVRE: And just as a reminder, we need just the Organic Poultry Working Group, whatever that's going to look like.

Calvin for materials, please?

MEMBER WALKER: Well, the board members
who will be here next year, the project's petition, 
and TR tracking which is an ongoing project, seed 
purity, and excluded method terminology is 
scheduled. That's it.

CHAIR FAVRE: For policy development, 
we'll take back your comments that we've received 
during this public comment period and continue to 
work on the policy and procedures manual and plan 
to bring that back some time next year.

Next thing on our agenda is the 
presentation of plaques to our outgoing board 
members and that will be done by Miles McEvoy.

MR. McEVOY: Okay, so I have the honor 
of presenting the plaques of appreciation to the 
five outgoing members who have served with 
distinction over the last five years.

It's really amazing to me that the time 
goes by so quickly. It just seems like yesterday 
I guess it was in Seattle was the first meeting and 
we had great discussions on what, GMOs and 
antibiotics and tree fruit production. That went 
on for a couple of years. And GMOs continues on.
Did we do ethylene then? Yes, probably. Was corn steep liquor still around? Wow, we haven't talked about that for a while. Maybe we should bring that one back.

So anyway, it's been my pleasure to work with all five of you. You've all contributed so much to this process. Thank you so much in terms of your public service. I just hate to see you go, but I know you'll be involved in the ways that you are in both submitting comments. Maybe we'll see you at the meetings. Maybe you'll be on the other side or working in your own communities to advance organics. So thank you Calvin and Mac and Nick and Jennifer and Colehour.

I can't believe, Colehour, you're actually -- wow, it's five years. Amazing. Okay, so I'm going to present the plaques and thank you so much for all your service.

MEMBER TAYLOR: May I just take a moment to tell everybody thank you so much. Thank you also to the Secretary of Agriculture for allowing to serve in this position as advocate for the public
for the organic consumer community.

And thank you also organic community for all of your help and support and to the board members as well. I can't ever say enough. Thank you. Thank you so much for the opportunity.

MEMBER WALKER: First of all, I would like to say one of the things that I learned I got it from watching Comedy Network. It is illegal to push a moose out of an airplane.

Let me continue. I would like to say first, Jean, and to the rest of you here, we would like to -- I would like to give respect to the late Senator Justin Morrill. He was a Republican from Vermont and he is the one that established land grant institutions. And he was the Senator from here at least 160 years ago. And not only that, when he discovered that the Ohio State, the Oregon State, Cornell, LSU and Texas A&M was receiving the funds, 30 years later he came back. He was still living and he saw that people of color were not getting the benefits as he wanted and he passed the second Morrill Act which gave birth to the 1890
institutions where Jennifer Taylor and I work. So we appreciate him for that. And we also thank Senator Leahy of being the father of organics.

Also, I'd like to give thanks to Frank Stronach, the founder of Magna Corporation; Dennis Mills, the CEO of Magna Corporation. They are now retired. Earnest Freeman and Dr. Owusu Bandele, who served here in 2000 and Mr. Shane Carmichael.

And going further, I'd like to say I thank Miles McEvoy for forwarding my application to the Honorable Secretary Tom Vilsack and my ultimate appointment on the board; certainly, my wife and my two sons, Marcus Ruben Walker and Michael David Walker.

Two weeks ago I received a USDA National Award, but nothing is to compare with the five years that I've served on this National Organic Standards Board. I was appointed as a consumer advocate. Most of the time I stayed in my lane and today I was all over the place.

Ronald Reagan said that America is that shining city that sets on a hill. Organics is a
shining agricultural program that makes up America's agriculture. To stay on top of the hill, we must continue to hold fast to the founding principles of organic principles and practices. If not, other labels will come forward.

Dr. Jennifer Taylor and I have talked over the last year and one of the things that we'll be doing, we'll be looking at establishing the New World Regenerative Agriculture Group in Florida and in Louisiana. And we want to mimic it on the GAP program. We have five star athletes. We have five star restaurants. We have five star hotels. And everyone can't be a five star. And we need to stop the bickering and the fighting because if we continue to fight, we're going to lose a lot of this program that we call organics.

Martin Luther King gave the story of two dogs. Let me take this back. The gentleman went to a dog fight. He put his two dogs in a cage and on the way to the dog fight, the two dogs got together and they fought and they fought. And when it got to the real dog fight, they both got their
ass whooped. That will have to be deleted, I'm sorry about that.

So we need to be careful how we fight because we don't want to do anything as we did with the bigger issues with seed purity, GMO, hydroponics, and consumer expectations. If we ignore these, we will be relegated to something that we don't recognize as organic.

In closing, I would like to say that I've made some tough votes. The consumer advocate groups that's been very vocal and I may have pissed off some or everyone since I've been on this board, but I do also think the GMO issue, you all might have to look at thresholds and tolerance levels because big ag. will never go away, whether you want them to go away or not. Maybe crop insurance or something has to happen, but if we want to survive and I can say that because I'm a minority. I'm 61 years old and being a minority, you don't get everything you want because that's just the way the system works.

Organics is a minority part of USDA. A
lot of things we want, but a majority of it we  
probably won't get because there are more greater  
and more powerful influences. So we've got to work  
within that construct. That's what I learned to  
do.

So in closing, I would like to say that  
I'm grateful to have served and delighted to move  
on to another page of my journey. We are all  
strangers in the land. We are all just passing  
through. Thank you very much.

MEMBER MARAVELL: It has been an honor  
to serve on behalf of producers, to serve the  
organic community and it's been a pleasure to work  
with board members and all the best to the new board.

MR. McEVOY: The next is Colehour. And  
now this brings me back. After the Seattle  
meeting, I don't know where he was going, but he was  
going somewhere that I was going, so I think we drove  
to Bellingham and picked up my son and then drove  
to Olympia and so that was the start of Colehour and  
my relationship of getting to know each other,  
spending probably a good five hours in the car
together. I think he was a little jet lagged still, so maybe it was NOSB lag is what was happening. But Colehour, it's been a pleasure and best of luck to you.

MEMBER BONDERA: Well, Calvin, you've put me in my place, but Aloha to all of you. I'll try to hurry, but bear with. This is my last time. You know, I grew up on a farm in Oregon. I already told you all that. And I grew up with ten siblings milking cows. I do want to comment because I think Calvin's point was well taken that organics aside of all of us, I'm the only one on a farm. So agriculture isn't easy on its own and then you subreduce it down to organic.

And like I said before, my eight sisters made me understand that minority concept without anybody ever talking about it that way.

And right now I have a farm. People are there harvesting coffee, processing my coffee. We're right now at the peak of my coffee harvest season and that's what I'll get to do when I go home is deal with the coffee on the hoshidana which is
the coffee drying deck and hope that the weather gets it off before the next round comes which I'm going to be jumping into fast.

I'll tell you historically, you know, I'm not that old, but I'm not that young. It was in the 1980s that I did my work as an undergraduate student with the Northwest Coalition for Alternatives to Pesticides and in 1991 my name is on my first little publication which was titled "What You Don't Know Can Hurt You" in reference to inert ingredients and pesticides. And in fact, when I look at that document, I didn't know him and don't -- whatever, there's Jay Feldman's name with NCAMP which is now Beyond Pesticides. And I really recognized then that the environment is so critical to the agricultural issues that I was contemplating and looking which in the context of university I wasn't, but I think it's important.

And you know, another example that's worth sharing is that I moved on to my international agricultural development career and had a position with Rodale Institute and I worked as an
international projects manager. And while I was there went with Jeff Moyer, a former NOSB member from Rodale Institute, and now directs that, to Argentina. And so I think the world is small is my point.

And that's my next point which is really that it's so hard for small-scale farmers to pursue even being certified organic. Farms that are small scale really have to work together and I think that that's really where we are at. I said it before in some comment, but I think it's critical to recognize.

The farm that I grew up on was not organic. We were organic only because we couldn't afford pesticides like my mother says. And like my mother says, everything is organic and really in some ways she's not wrong. So we need to be cognizant of that. Because for me, the growth of the organic industry is vital, but at the same time it has to be healthy. I'm not an employee of the USDA. I'm not an employee of a nonprofit organization. I'm an actual farmer who wants us
all to work together and look at that bigger picture. That's why I'm here in this seat is because the bigger picture I can't ignore and I think that's so vital for us.

At a personal level, that has been a critical part of this entity that exists. And I think Jennifer Taylor and Calvin Ruben Walker are really, for me, have been a consistent basis of reminding me of the consumer basics. And I think that we have to be acknowledging of that because we're all consumers.

And I think in terms of learning, for five years I served on the NOSB and I learned pretty quickly that I can't waste time focusing on single opinions, but really I have to focus on working with one another to seek positive improvement about how the process can be healthy, rather than isolated material choices because without a healthy process, we're not going to be healthy. I think that that's so critical all around.

I think that range of perspectives though has really helped me balance my behaviors in
life and I think it's critical, but I'm talking within the NOSB, but really we're a public advisory group and it's the public input that I represent and that we have to make sure we do and that's never been easy. This isn't about a single company or one person. It's really about working with the bigger picture and what is the whole.

And I think, I already said that, but I think that repetition isn't bad with that because I think that making day-to-day choices as an organic farmer, it's really looking at the environmental impact of those choices, looking at what the consumers are going to do when I'm selling at my farmers market every week. I'm thinking about -- I'm not thinking about it, I'm hearing from the consumers how they're making decisions and what they're doing and I think that keeping up to speed with that is so important.

And I guess I want to mention that there's some proudness, there has to be, right, that comes out of this process and for me, it's that respect at all the different levels, the respect not
just that I'm able to show, but the respect that I've been able to receive within the NOSB, between the NOSB, myself and the rest of the NOSB and the public, between the NOSB and the NOP. I really think we have to work together to find that right answer.

Coming in, it was really Barry Flamm that really helped me understand that the environmental component was so critical and Barry was able to make me recognize that we are looking to a higher goal and a broader picture to uphold OFPA and to carry out our responsibilities. And I think that that was vital and at the same time what really worked for me that I found very critical as an incoming NOSB member, I didn't know what was going on or what to do or how and having a mentor I did not know what to do, like I already said, but I was so happy that Jay Feldman stepped forward and served that role as a mentor for me because logistically otherwise I was just lost in all of the confusion that I think we're all there with.

And I think my goal and role in life isn't -- we're all here and we all serve together
-- but I'm not striking out to make friends or allies to do things. Instead, what I'm looking for other perspectives outside of my tunnel as a producer, as a farmer. And within that Nick Maravell really has reassured me that it's not only capable and viable and possible, but I'm glad that he's been side by side with me the whole time as another producer. That's been a vital component. But I have to say it's been -- people such as specifically Liana Hoodes. She was with NOC, National Organic Coalition; yes, Mark Kastel of Cornucopia; Lisa Bunin of the Center for Food Safety; Jay Feldman and Terry Shistar of Beyond Pesticides; and Urvashi Rangan of Consumer Reports, who really have been there through my whole tenure to really help me and analyze and consider actually perspectives that aren't mine at all.

I don't subscribes to things like Consumer Reports or things like that, but to get the other perspectives has been for me vital. So I think I'm trying to point out what I see as the critical component which is you can work within the
NOSB and I can work with NOSB to NOP, but I've got to work with people that are around me, too.

What I'm working towards is not to maintain the status quo because that's the opposite of what I understood my role to be. It's to seek continuous improvement. And I think that that's really important.

And before I do my final thank yous, there's a few things that I think are worth sharing which is sadness regarding how the 2013 NOP decision on the sunset voting really for me at this meeting, which is my last meeting, if the structure voting hadn't changed, I would feel very, very, very different than I do at this point in time, the fact that the voting has been flipped around from what it was which has been confusing even there at this meeting for us, has really left me sad to watch a number of items and I didn't count, but quite a number of items remain on the list that would have been removed in the previous system. So if we count it that way rather than count how many were still removed, I think it's important.
I do not think the individuals, Michelle Arsenault, Lisa Brines, Emily Brown Rosen, or Miles McEvoy are doing anything except amazing jobs and I think that what we have to think about is -- and if you read, like we talked about briefly, I think Nick asked the question also, we should have hired an executive director that's the spokesperson, as the liaison between the NOSB and NOP for effectiveness and functionality. And Liana Hoodes handed around a sheet of paper that says something along those lines and I've agreed from day one, but I think we also need like it was brought up today, a staff scientist, a staff lawyer to functionally operate.

I really want to thank my direct family, my wife, who came to one meeting, my children who never encouraged me, but supported me, my personal friends. I mean I've got to tell you it's not true of all of us, but some others, too, I'm here to not make money as a farmer. I'm here to do this instead. And I think that that's critical. I think the present NOSB members', past NOSB members'
willingness to work together, respecting my input, recognizing that we have to work together is vital.

I'm packing up my bags. I'm going back to my farm. I honestly hope that somebody can be convinced to represent the NOSB in a small farmer position sitting here. Since day one, it hasn't been easy.

And I have a few final questions I'll ask, but before I do that I'll respond to something Miles said because I think he hit the head right on the nail when he added that extra commentary because our first interaction wasn't what he said. When he called me up to accept me on to the NOSB was our first interaction, and in that call he said something that I can't quote, I don't remember, but it was critical. He's like are you really sure you can do this basically? Like can you leave the farm and do this? And I think that's so true because it's like yes, I can do it. But what did I give up and I think that that's really -- I'm always called the question person since I've been a little kid. I have lots of sisters, but I'm always the question person.
But I think that, you know, I have a few questions that you all can resonate on or take with you and I'm done with this process, right?

One question is has it been clear to the NOP when switches between references have been made such as from Off Putt or Robert's Rules to FACA to justify decisions that even at this meeting really didn't settle for me as a volunteer? Dismissals simply by one interpretation doesn't feel like we're all on the same page and following the same rules. It feels like it's a declaration of interpretation which could be interpreted differently from the exact same reading from an exact same person and that doesn't leave me feeling like we're all together. And I think that's a question of concern and suitability and I think it's worth raising.

And I think you know, I think that a big thing in terms of the NOP feeling that their decisions about process of dismissal of concerns, when I've raised concerns, when concerns have been put forth in terms of NOSB votes or representation
by who is our elected leaders, recognizing that they were elected by a previous NOSB board, not by the present one. And in some cases that makes a much bigger difference than others, because a lot of people change like this upcoming people. There's going to be six new people. We need to really reflect and review and respond directly or my point is do we need to respond and reflect and review to the concerns raised rather than just expect them to be dealt with internally when they're raised as questions?

I'm done and I'm sorry for carrying on. I'm done in a moment here. I really think that one of the questions I raised that really wasn't ever addressed or dealt with was everybody was -- the new people were all brought to D.C. to be trained, and we, the NOSB, were separated and divided and from my perspective that's not the way to be together. That's the opposite. And I feel like the net benefit is divide and conquer, rather than work together harmoniously.

You know, I just ask everybody and like
I said, think about it and reflect on it, I hope that giving up a significant portion of my family income and raising my children, I hope that it was worthwhile for the NOSB and for everybody that I was here to provide another perspective because I really want organic to work for all of us and I really hope that it can and will and I applaud everybody's efforts to do so. So Aloha.

MEMBER STONE: Just a couple of thoughts. What a privilege it's been to work with a group of people like this and the broader audience. The time does go fast. It's kind of like when you're raising kids. The committee meetings seem to go on forever, but the years just clip off like that.

I was a babe in the woods when I got to Seattle and thankfully Katrina Heinze was sitting next to me. She was very patient with me and she didn't tell me what to do, but she gave me some guidance to help understand what was happening around.

The caliber of the conversation, the
complexity of the conversation, I grew to learn that there is no black and white. We have to vote yes or no which sounds very black and white but there's always losers. There's always winners. And like I said earlier, it's just really, really hard on this side of the microphone when you know that it's not all good, no matter what you do.

I really want to give a thanks to the certifiers that helped me. I hope I've represented them in an honorable.

It was an honor to be chair, Jean, Tracy. It's a pretty small club of us that can say we were chair of this group and I appreciate the confidence that the fellow board members showed in me.

But Harold, when we voted on tree fruit, leading up to that vote, I remember at breakfast that morning, Jean and Harold and I were eating breakfast and they knew they were going to vote differently on that. They knew what a difficult vote that was going to be. But I was never more proud of a group of people. When we got through that vote, that was a tough one. But I think it
created a bond that helped us since then to do good work because we knew how tough it was to do good work that day.

A shout out to the NOP, Miles, Emily, Lisa, you all do great work, but it pales in comparison to what Michelle does for us.

So truthfully, Miles, you've got the big bull's eye right there on your chest, but nobody cares about this more than Miles. And you've seen it from its infancy and just appreciate the stepping up that you've done and the morale of your staff and everybody around. It's just been tremendous to work with the NOP. There's nobody there that doesn't get up early or stay late to do what they've got to do.

In the words of Chuck Ross earlier this week, it's easy to focus on our differences rather than start at the beginning of where we work together. So hopefully we can continue that. At times, it felt like the beating will stop when the morale improves kind of a conversation, so hopefully we can -- we can kind of learn from that
and go forward. And frankly, I think this Consumer Report report that Urvashi and Charlotte have that shows where they -- they want to show how great organic is and they can help us make it better, but their tone changed at this meeting and I just appreciate that.

So no matter what I was able to contribute as an individual, I feel like I gained much more as an individual, so I just really appreciate the opportunity. Thank you.

CHAIR FAVRE: I'd like just to say I'm humbled by the words of wisdom of our outgoing board members and hope that I conduct myself with the same grace that they've all shown on this board and their words have reminded me about the great opportunity that I personally have had to work with them. And I personally want to tell you how much I appreciate what you've done and we'll be sad to see you go. Thank you.

I just want to say in closing remarks that I'm honored and humbled myself by the support you guys have shown by electing me chair. I've got
some giant shoes to fill with Jean and Mack having had these positions before me.

I'm really proud of the work we've done this year. It has been a tough, brutal year to get through with these sunset materials. But it is sort of a bond forged in fire. And while I'm really glad we're through it, I'm looking forward to moving on for next year.

And with that, I'd like to close this meeting from my portion and turn it over to Miles.

MR. McEVOY: Okay, this has been a really great meeting, really appreciate all the public input, all the work from the board, the completion of 2017 sunset review. So I probably wear this shirt in solidarity with the board, but know that the AMS and the National Organic Program have a lot of work to do to actually implement the work of your sun review process. So from here we go forward with a Federal Register notice to renew the substances that we're not recommended for removal and we move forward with the proposed rule to remove those substances that are recommended for
removal, get additional public comments and then
issue a final rule to remove those substances from
the national list based on your recommendations.

So I'll probably wear this shirt, but
remember that we still have a lot of work to do and
we look forward to supporting the board's work in
the future with your new work agenda and seeing
everybody in Washington, D.C. in late April. So
with that, the Fall 2015 meeting is closed have a
great rest of the week.

(Whereupon, the above-entitled matter
went off the record at 4:23 p.m.)