U.S. ENVIRONMENTAL PROTECTION AGENCY

PESTICIDE PROGRAM DIALOGUE COMMITTEE MEETING

Thursday, May 9, 2019

8:30 a.m.

DAY TWO

PARTICIPANTS

Walter Alarcon

Amy Asmus

Steven Bennett

Pat Bishop

Lori Ann Burd

Iris Figueroa

Jim Fredericks

Eric Gjevre

John Gorman

Richard Gragg

Aaron Hobbs

Eric Hoffman

Sheryl Kunickis

Dan Kunkel

Dominic LaJoie

Charlotte Liang

Amy Liebman

Allen McLaurin

Damon Reabe

Charlotte Sanson

Sharon Selvaggio

Donald Taylor

Andrew Thostenson

PARTICIPANTS (cont.)

Liza Trossbach

Tim Tucker

Jay Vroom

Edward Wakem

Andy Whittington

Nina Wilson

P R O C E E D I N G S

DAY TWO - MAY 9, 2019

MR. KEIGWIN: All right. Good morning, everybody. Thanks for joining us early, or at least earlier than we had originally planned. There's been a suggestion by somebody at the head table whose name is not Sheryl Kunickis that we practice our School House Rock thinking. Would you like to help?

MR. MESSINA: No one is seconding that, so I think we're good. I think we're good.

MR. KEIGWIN: You suggested. I second.

MR. MESSINA: I did not suggest it.

MR. KEIGWIN: Anyway, with that levity, so we're going to pick up from where we left off last evening on UAVs. So we had about six or seven presentations yesterday afternoon. But what we did not have time for was to look at the charge questions that had been prepared for that session to begin to get some discussion going amongst the PPDC members.

So Shannon is going to check that and I'll ask Ed to lead us through the next half-hour. Alex Dunn is still expecting to join us at about 9:00 a.m., so if we haven't finished up the discussion by then, we'll take a pause so that Alex can provide some remarks to us and then we'll move on from there.

Ed?

MR. MESSINA: Great. Well, thanks, everyone, for the presentations we had yesterday. And while we're putting up the charge questions, any other questions, too, that folks think we need to discuss in this area. So go ahead, Jay.

MR. VROOM: I just wanted to comment on both the hemp session, whether it's industrial or agricultural or whatever the right descriptor is, and also the UAV sessions yesterday. I felt like they were very comprehensive and provided great background for the PPDC and Agency staff and wanted to compliment you guys. We probably aren't qualified yet in an advanced college degree in either topic, but we ought to get at least two or three college credits for being able to receive those presentations and really have some dialogue there. So I look forward to the additional conversation we'll have about UAVs.

MR. MESSINA: Yes, thanks. And thanks to Shannon and folks who -- and behind the scenes, Liza, who reached out and really tried to sort of canvas, you know, who are the folks in this area that are experts. And we'll continue with those conversations.

Jay, you want to say something else?

MR. VROOM: Yeah. And just in the respect

with the conversation and where I think I sensed the Agency is at with regard to addressing the hemp pesticide availability question that -- it feels like you're in a really good spot in terms of point of departure and thinking through how to address this. And I believe it will not only help the Agency and eventually the PPDC in the future on that topic, but also it's really a precursor for other forms of marijuana and pesticide intersection, which the Agency and the industry have struggled with in the past. And I think this will give you a good way to step-wise through all of those future challenges, many of which are actually here today with the state legalizations that have already occurred.

There was some mention of Canada. I know PMRA has struggled mightily with the fact that their Federal Government has legalized marijuana recreationally nationwide but really didn't give them the resources or a lot of guidance around how to deal with ag inputs, including pesticides. So continuing to have a strong dialogue with PMRA on all these things is really going to be important. Thanks.

MR. MESSINA: Thanks, Jay. Liza had next?

UNIDENTIFIED MALE: Nina was up.

MR. MESSINA: Nina? Nina.

MS. WILSON: Thanks. Sorry. And I just wanted to clarify some of my comments yesterday, because I was a little bit confused about the charge questions with regard to what the guidance is, because in my mind having been somebody who spent a lot of time doing residue studies the Agency has a very, very good set and very thorough set of how to do -- you know, how to do studies for residue definitions and for all the process commodities.

And I know that the biological industry is, you know, very happy to have products that, you know, you would consider first. But I think we're very interested in making sure that we sort of go forward with the conventional and trying to figure out what that is because biological products work best in an IPM program with other products as well. And so we would be very interested in making sure we understand what that guidance is.

And the other question I had about that is is there not an industry, a hemp industry organization, that is --

MR. MESSINA: So there is a cannabis association. And so as we navigate addressing the legal uses of hemp, we're focused on that aspect, which that industry is maybe more focused on the

marijuana growing for, you know, that purpose.

MS. WILSON: Mm-hmm.

MR. MESSINA: I think there are folks in that space that are also interested in the hemp space and they are sort of -- we're talking to the folks who are interested in the hemp cultivation. So -- and there isn't yet a specific association that deals solely with hemp.

MS. WILSON: Okay.

MR. MESSINA: And then to your first question, I agree, you know, we have a lot of the capabilities here in house. I think the varying uses and how they're used and sort of getting a sense of that, and one of the charge questions on hemp was worker exposure was really one of the questions and how is it being used differently so we can understand how we're going to conduct our risk assessments and what studies are sort of being required.

But I agree, you know, we have that capability. But I think because it's a new area and we're new to it, we're just sort of asking those questions so we can be strategic about it.

MS. WILSON: Yep. Thanks. I appreciate that. And the other comment I made, again, having someone who's been watching the regulations change as

science changes, as agronomics changes, you know, it sounds like it's a very dynamic and changing industry. And so I think just defining what we know now and then being able to come back and refine what the guidance is every time, you know, we see that there's a big change, I think would be helpful as well rather than waiting for complete clarification. Because I'm not sure that there's ever going to be.

MR. MESSINA: Yeah. Fair point. And when Jay was making his great remarks about how we're being well positioned, those are the questions that start raising in my mind because I think the -- there are some -- maybe some quick wins or things we can do quickly, right, and get products registered, but I think there's a bit of a discussion in terms of the studies that are going to be required and how they're going to -- how we're going to review those. That's going to take a little bit of time.

And so I want to manage people's expectations there at the same time that the Agency is -- the growers are going to be, you know, asking for products to become on market and we'll have to work with registrants who are willing to have those on labels and there's a lot of Congressional interest around this. So all of those things sort of pop into my head

as I think about, you know, how we're going to solve this problem collectively and provide tools for folks.

Liza is next, yeah.

MS. TROSSBACH: So I have some comments regarding the UAVs. As Rose Kachadoorian isn't able to participate this morning since she's on Oregon time, I don't know where her dedication is. She should have -- no. She could have gotten up at 5:30. I don't know what her problem -- so -- but she had some kind of comments/questions, so I wanted to offer those to the group regarding the data sources that may be available; of course the agrotechnology workgroup just wants to offer its, you know, support to the Agency in the collection of any information from pesticide regulatory officials about what individual states are doing in regard to their certification, you know, licensure requirements and questions and concerns that they may have. And, of course, we can collect information and anything that may be needed.

Also, regarding the development of the protocols for drift studies, there was a question about, you know, who may do that and some potential expertise, and we would offer that much like with the hemp and the research, there are a lot of land grant universities that are doing work with UAVs currently

and looking at drift patterns and their uses for agricultural, you know, whether for scouting or for pesticide applications, a whole variety of things. So certainly that would be, you know, a data source there.

And then Rose's final question was, you know, would something potentially like the PR notice that was used for chemigation be a way to address any of the, you know, labeling issues, you know, that should come up. And maybe that can't be answered now, but just kind of in terms of that, if that might be a viable solution after the presentation by Damon with the differences between aerial applications and the use of UAVs and some of those things.

There seems to, you know, be questions now about some of those -- you know, what is the exposure, the drift situation. You know, those types of things that I think at least states or pesticide regulatory officials kind of just assumed it was much like aerial applications just because it's in the air. And so you're thinking, well, it's probably pretty similar. But some of those points that were brought up, I think, certainly the agrotechnology workgroup are going to want to find out more about it, and we assume the Agency as well.

And then just two comments from my perspective. I just wanted to kind of remind the group usually you talk about the use of UAVs in agricultural settings and maybe right-of-way work in forestry and some of those initiatives. But just remember there are non-agricultural applications or (inaudible) that may be used, what may be considered, you know, structural. It could be around a residence or a commercial building. It could be lawn ornamental. It could be using a UAV to get to a higher structure, you know, in a building or a higher portion of the structure. So just to kind of as we talk about labels and modeling and all that, just to remember there are non-agricultural possibilities for this technology.

And then finally as we've talked about with a lot of things, really the consistency and responses and distribution of information is really important obviously to the pesticide regulatory officials, as well as the regulated industry particularly as decisions are made regarding does this fall under aerial application, what are -- you know, do current labels allow the use of UAVs as an application. Equipment -- it's really important for us because many states now are in the process of trying to determine

will UAVs fit in their current aerial applicator categories; does a new category need to be developed; do manuals and exams need to be changed, those types of things. And we're seeing more and more companies expressing interest in the use of these. And so it's really important to have that information, one, consistent, timely, and then broadly distributed. Thank you.

MR. MESSINA: Thank you, Liza. I think Amy was next.

MS. ASMUS: I think I want to kind of echo some of the last comments. It feels in the field right now a little bit like when dicamba seed was approved and we had no tools to use over the top. Hemp is out there. It's a crop. And we struggle to find the correct tools to use over the top. And so I ask you to move forward with your assessments in a timely fashion so that we are not put in the middle out there with people that have permits and are using and planting the crops, and then they come to us for pest management. And we really want to be responsible in our use of that pest management.

So I would really emphasize that those that you can put out there quickly so that we have the parameters on how to use them safely and what we can

actually use over the crop is out there. We would truly appreciate that.

The same thing with drones. We have the toys out there and not the direction to use them properly. And so I would also ask whatever is decided, please do that in a timely fashion and be consistent in your education of how we can use them.

I was glad to hear in the presentation yesterday that you were working with FAA because I think there are other applications of the drones, and I do think that they need to be used responsibly when we do use them. So thank you for looking into it, but know that we do have these things on the ground now and we look for guidance to use those tools correctly. Thank you.

MR. MESSINA: Thank you, Amy. I think Dan was next.

MR. KUNKEL: Thanks, Ed. Yeah, I just wanted to reiterate, I think at our last meeting I indicated the importance of drone use for specialty crops. There’s a lot of small areas that need treatment, difficult to get to sometimes. So we’re very interested in seeing how this develops.

I think some of the exemptions that Damon referred to yesterday would be very important to minor

crop spot treatments. We also use them for scouting. They're used for scouting and also dispersing some beneficial insects as well. So some of the other utilities for drones.

MR. MESSINA: Thanks, Dan. Damon?

MR. REABE: Thanks. I wanted to reiterate something to kind of provide some perspective on my presentation. And that is we talk -- it was mentioned quite a bit about a level playing field. And ultimately as these devices scale up, our industry is going to embrace these tools. So the use of UAVs in agricultural settings I'm sure is coming. At some point it's going to be very feasible on large scales. And it's very likely that companies like my own will end up purchasing these devices when they're economically feasible for the type of work we're already doing.

So it's not an issue of a level playing field or a man versus unmanned aircraft. It's a perspective of if, for instance, I could go to Air Tractor, a agricultural aircraft manufacturer, and let's say they produced an unmanned aerial vehicle that was of a multi-rotor design today that's scaled and capable of doing what my manned aircraft are currently doing, I simply wouldn't buy one because I don't know how it's

going to perform in the field in regards to spray drift.

So the -- in my opinion -- and I know I made it clear in the presentation, the path forward for this is very clear because it's been done already. And so I -- it seems to me that the registrants, the drone manufacturing industry, is going to need to replicate what the spray drift task force did back in the early '90s.

And so it's a real clear path. It's not fast. But it didn't take long. When the spray drift task force formed until they perfected the ag drift model was a matter of about two to three years. There was additional refinements that happened over many years after that and it took a long time before the EPA actually adopted it through the entire risk assessment process.

But it's a -- it's a really great roadmap. And so I think that's just -- from my perspective, I think that's really great guidance to provide the EPA, and the EPA can take that to the interested parties and aid them in what the road map looks like.

MR. MESSINA: Thank you, Damon. Sharon?

MS. Selvaggio: Two comments. First, it was illuminating yesterday to hear all the discussions.

And I think Damon brought up some really interesting points with regard to the drift still being relatively poorly understood given the number of different kinds of devices there are and the way the technology is changing.

And so I think under those circumstances, the EPA really needs to adopt a conservative approach when considering off-target impacts. And so I -- you know, until the data is in that it's sufficient for really truly understanding sort of site-by-site and device-by-device really what the kind of drift implications are. So that's one comment.

The other comment that I had was that I have a little bit of concern about how efficient these devices are in reaching places that traditionally we haven't been able to reach. That was kind of brought up by the person who talked about the wetland spraying and -- I can't remember if it was Texas or Florida, some place. But -- and so I guess a question arises for me about if we can get that efficient and reach 100 percent of the habitat with this great effectiveness, it seems to me like we're creating this selective pressure that hasn't existed in the past and that we may end up with the potential for resistance developing where we haven't had to deal with that

before. So I think that's going to be something that EPA will need to watch for. So.

MR. MESSINA: Okay, thanks. Anyone on the phone? I don't see any comments here. Oh, okay. Yeah, Amy, sure.

MS. LIEBMAN: I just wanted to -- I thought it was a really interesting and educational session yesterday. It introduced us to a world that we don't often think about. But I thought that -- was it Rose -- was it Rose that spoke? I thought she brought up an interesting point about the AEZ issues and the application exclusion zone.

And regardless of what happens with the AEZ that the EPA now is trying to change, that the idea that you have to stop application when you see a worker or you see a bystander is a good concept. I think it's a concept that everyone in here can agree that we don't want to spray people. And so I just want us to really, as we move forward and we look at the research and we look at the evidence and we think about how these will impact, you know, the world, we need to remember the human being part of it. And there's a lot of excitement with it and some of it's like a no-brainer, like why wouldn't you do this? But there's other pieces of it that are real-world

applications.

And I think your photo showed when you were showing the -- some of the drift, there were actually two people in -- you know, that were near there. So I just want to make sure that we are considering the human factor and we recognize that we can have all the models and, you know, everything perfect. But there's still the human component that we need to pay attention to.

MR. MESSINA: Thank you. Damon?

MR. REABE: You bring up a great point, Amy. In regards to application exclusion zones, we've talked about it in the presentation. Currently -- kind of addressing Amy's concerns, I guess, currently the Federal Aviation regulations require the device to be within line of sight at this time any time an unmanned aerial vehicle is being operated, which I expect that to change. It's just a matter of time before there will no longer be a line-of-sight requirement.

And I think the application exclusion zone piece of this, it's going to be important to ensure that these devices have the proper cameras so that the operator, who is not near the site and not able to see the vehicle, has some means of seeing people.

And I don't know what that camera would look like. I don't know what type of display we're talking about for the operator. But that's a huge part of unmanned technology that is missing when it comes to pesticide application.

I had a -- I visited with EPA staff that's here with certification at one of the breaks and I was explaining I just recently, in preparation for this meeting, I treated 3,000 acres of alfalfa prior to coming to this meeting.

And I was thinking about all of the observations that are done while I performed these applications. And I -- and I realize that I'm observing what's happening around the treatment area, a radius of approximately a mile and a half. Because I'm not looking just immediately around the treatment area. I want to know is somebody riding a bicycle down the road? Is there a jogger, a motorist? What -- anyone that's going to come near this treatment site, I need to know that they're on their way. Right?

And so I thought to myself, how would that piece of this -- how would the operator of an unmanned aerial vehicle know that this is taking place? And I think that's a -- that's a big part of what we're

doing here in this meeting when we're discussing UAVs, is a huge consideration.

Frankly, the spray drift risk assessment is a simple plan, a simple process, that's well laid out. But now how do we ensure that, as Amy said, that we're not accidentally spraying people? And that's a huge part of our job. That's label language that's currently there that is -- that is, in fact, law, and how do you even -- even beyond an application exclusion zone, how do you ensure that you're complying with the label statement that says "Do not allow this product to be directly sprayed or drift onto persons." Right? And how is that going to be accomplished. That's a -- that's a difficult thing to do with an unmanned vehicle.

MR. ESSINA: Jay and Sharon? Jay and then Sharon.

MR. VROOM: So first I'd like to acknowledge the thoughtful approach that the ag aviation industry, Damon and AAA and Andrew, are bringing to this subject. They've already offered a lot and I think they've got a lot more to offer to EPA's consideration.

Second, I think the more holistic engagement that we saw yesterday from the presentations that

include both obviously, you know, what Liza represents from AAPCO, SFIREG, that comprehensive engagement, USDA's, I'd encourage you to think about more active engagement with FAA than whatever has happened already. And I, too, am glad that that's started.

But I think that Andrea and Damon and AAA can help you a lot with understanding some of the blind spots, frankly, that FAA has shown in this space in the past. I think they can be engaged in a more positive way. And I think EPA has the opportunity to do that outreach and affect some of that additional engagement in a more positive way.

And then, third, something that I don't think we've touched on much in any of the presentations or commentary is the role of UAVs in advancing and accelerating scientific research, including research on pesticides and other agricultural technologies. If you talk to folks at the risk management Agency over at USDA -- maybe you already have, but you'll see that they're deploying the use of UAVs for crop damage assessment with regard to claims for crop insurance, creating a whole lot more precision around that functionality for that part of the USDA. There are things that they will learn in devising and advancing UAV technology for those purposes that can benefit

what EPA and OPP need to think about.

And then lastly I think there's a role, a very significant role, for UAVs in integrated pest management going forward. And I think that ought to be a footnote that ought to be captured and kept into the focus of OPP going ahead. Thanks.

MR. MESSINA: Thank you, Jay. Sharon?

MS. SELVAGGIO: Yeah. Just a followup comment. And I've been thinking about this and I just don't -- I'm not really sure of the role of EPA. But I -- you know, it occurred to me because I think I mentioned last time we had one of these presentations that, you know, a family member of mine has a drone. And just looking at the amount of data that these things can collect and thinking about pesticide application, record-keeping, reporting, incidents, privacy, all those kinds of things we have the capacity to have the kind of records that we may never have had before. Who will have access to those? How long will they be required to be kept? You know, these are things that I think are important to think about as well. So just a comment on that.

MR. MESSINA: Okay. I don't see any cards up in the room. So should we go to the phones and see -- anybody on the phone? Good morning.

UNIDENTIFIED MALE: (Inaudible). I don't have any additional comments at this time. I just wanted to check in.

MR. MESSINA: And any other topic as --

UNIDENTIFIED MALE: Or we can go back to hemp --

Good morning.

MR. MESSINA: So, Andrew, Richard or Iris, any comments on either of yesterday afternoon's topics?

MS. FIGUEROA: Good morning. This is Iris. Yeah, I have the same concern on the UAVs about draft or direct spray.

MR. MESSINA: I think we're having a hard time hearing you. We're going to try to turn up the volume here in this room.

MS. FIGUEROA: Okay.

UNIDENTIFIED MALE: Do you want to try now?

MR. MESSINA: Yeah.

MS. FIGUEROA: Is this better?

MR. MESSINA: Little bit.

MS. FIGUEROA: Okay. So I have the same concern that Amy mentioned, and Damon, about direct spray or drift on bystanders. And not just the visibility, but also the ability to control and to react in a way that was timely to prevent exposure to

bystanders. So I think that's definitely one of the things that the EPA should be focusing on when thinking about this new technology.

MR. MESSINAV: Okay. Thank you. Anybody else on the phone?

MR. GRAGG: Yes. Richard Gregg. My comments, I think the presentations brought to light a lot of interesting factors, and the comment this morning about the research I think is very relevant because in my opinion we can't assume that we can translate large aerial spraying and then come down to a much smaller scale in the UAVs in that there's just not going to be any issues that we need to be concerned about.

And what those issues are, I don't specifically know. But I think -- I just -- I thought what I heard yesterday was some of the comments saying that a lot of the technology is already used in the manned aircraft and therefore just translating it down to a smaller scale, that there wasn't going to be too many issues.

And I just don't think we can make that assumption for a lot of reasons that I don't need to go into. So I think also what I heard from the discussions in the comments of who may be involved or

EPA is collaborating with, I'm sure all of those things I would expect are going to be accounted for or investigated or the questions raised in terms of what new risk issues may arise, because we're going to such a smaller scale in terms of the deposition of these pesticides.

MR. MESSINA: Okay. Thank you. I see in the room Damon has his card raised. We'll go to him next unless there's anyone on the phone who also wanted to chime in.

All right. With that, we're going to mute the lines again and have Damon talk.

MR. REABE: And I'll make it really brief.

(Inaudible due to phone message playing.)

MR. REABE: -- and scale. So we think about what it's like when they scale down. But when this regulation matrix and this label language is developed, we have to also think about what happens when it scales up. Because the trend with these vehicles are actually to get larger. And so when the EPA is formulating this, we have to think in both directions. And, again, there's a clear pathway for the EPA to understand that the aerodynamics of each type of vehicle have to be considered when doing a spray drift risk assessment.

MR. MESSINA: Okay. We are running out of time. I don't see any cards raised. Any other last comments? And I understand Rick was -- we understand Alex is here and Rick is going to go pop out to see if she's in the hallway. Then we can start with her comments.

All right. Well, again, thank you for all of the presenters yesterday here and from afar. I was really happy with those sessions. I think we got a lot of information. It's nice to hear that echoed in this room.

We do have a lot to think about on both topics. That's why we thought that'd be great for the agenda because these are, you know, areas where we do need feedback and all of the concerns that have been raised are a lot of the questions we're struggling with right now and really appreciate your help and your comments on that.

So, with that, let me close that session, and unless there's anything else -- and then we'll move on to Alex's presentation.

(No recording from 46:00 to 1:03:30)

MS. BURD: -- request to get the information after class -- to get the information (inaudible) posted to the internet. And there's a lot

of information that is not made publicly available. And those Freedom of Information Act requests can languish for many years, leaving us no choice but to sue for the ones that are our highest priority. But many more go unreleased.

What is your vision for -- and your plan of action for how to make those requests come through and to get us the documents we need to understand what's going on so we can believe that there is a transparent process where there's nothing to hide.

And I have one more question after this.

MS. DUNN: Oh, great. No, I appreciate you raising that about FOIA. Actually, we -- I just received earlier this week a bar chart of all the offices and the number of FOIA requests that we have. And I first looked at it and said, oh, I'm so glad we're not on here. And then I realized we were and we had a really long -- a really long bar, which meant that we had the most requests outstanding.

And so based on that, I've asked Rick and others, and Ed, who's been working a lot on our data management component, how we can -- I mean, frankly we don't want OCSPP to be the longest bar on the chart. And actually we can quibble with the chart because we are turning around more FOIAs. We have -- our

proportion is pretty high in terms of the number that we get. So maybe some strategic conversation about are we getting requests for things typically that we could more regularly make available that people wouldn't have to then FOIA them. So along your lines, increasing the transparency.

When it comes to people's emails and things, that's -- you know, a FOIA asking for every email regarding a certain subject, that's -- you're not going to find that on the internet. We have to pull that together. But we -- you know, I came from a region where we got FOIA'ed a lot and, you know, we produced those types of things. It takes a little longer.

But I hear you. Timely response is important, and we will continue to work on that.

MS. BURD: Thank you. My second question, we learned via FOIA, you know, documents we had to sue to get from Fish & Wildlife Service, not EPA, despite sitting on this committee, we learned that Chlorpyrifos jeopardizes the continued existence of 1,399 endangered species. This is -- this is one of many, many pesticides. We know that the decisions this office makes can mean life or death. These can be extinction events. You know, I think it was a year

ago when one member of this committee asked directly which species is this office okay with letting go extinct while it goes through the continual effort or process of refining and refining.

Endangered Species Act process was never intended to be perfect. It was intended to rely on the best available science. And yet we're seeing this continuous delay year after year after year. And now we're seeing a BiOp that was almost done, almost ready to go out the door, once again get delayed. And the quest for data that in many instances does not exist, actual use data, it's very frustrating when we're thinking about species actually blinking out and never again being seen on earth.

What is this office doing to make sure that it's not causing extinction given that we know Chlorpyrifos jeopardizes the continued existence of 1,399 species and is one of many pesticides?

MS. DUNN: So I was checking to see if something had been covered already. So Endangered Species Act, boy, when I got this position I -- I asked the question, I said, wow, you know, is it -- is our conflict between, you know, the pesticide program and the ESA as large as it appears. And, you know, the answer was, well, it's even bigger than it

appears. Right? This is just a really, really thorny, complicated, litigious area. And we are, as you know, in a number of lawsuits that have been written up that are asking us to commit to, you know, getting some of these complications done over a period of time. And we're working on those.

But I'd say that with ESA, we have to think of it as, like, four level chess or five level chess or whatever analogy you want – but we have to work on it on multiple fields. Right? So there will be a litigation field, which would be, like, what does the law say and it's-- it's not always the most flexible forum to sort things out. But, again, as a lawyer I believe in the legal process. But it can be rigid in terms of how the parties have to interact with one another and how solutions come forward.

So that's one playing field that we're going to talk about for ESA. Another playing field, I think, is just the day-to-day work that we do on ESA and really raising our capacity and our game as we continue to go forward because every single day we're making choices and decisions around the impact of pesticides on species. And so how do we elevate our day-to-day work. That's another playing field.

One that I asked if we had talked about is

the fact that I think you all know we worked on the MOU with the services that was, I understand, pretty well received, depending on where you sit. But I haven't, you know, had my ear rung out yet completely on the MOU, which seemed like a good start. You can catch me later and give me that.

So -- so we want to continue that process. We have a larger framework that we'll be announcing very soon that we worked with the services on as well as with CEQ, Department of Agriculture. I think that's all the agencies, but multiple federal agencies spent quite some time working on it. And that will be made available for public comment very, very soon.

Also, the Farm Bill, as you know, memorialized the MOU and put EPA in charge of a principal level group that will meet regularly and has deliverables and reports. So I -- I know that probably the issue we all think about before we turn our phones off for the night, if we ever do, is, you know, sort of the ESA issues are kind of looming at all times. And we really want to do our best work there. It's -- if it were easy, we wouldn't be where we are. So what I can commit to is that we continue to just keep going at it and keep trying to do better. I mean, we can't stop, basically. Yeah.

MR. KEIGWIN: Okay. I think Dan and then Sharon. Okay. So -- yeah. Great.

MR. KUNKEL: Thanks, Rick. Thanks, Alex, for your comments. And I just wanted to comment on behalf of the Arrow Four (phonetic) program is a USDA-funded public program that generates data to registered products on specialty crops, minor uses. So we work on a lot of oddball crops, the prickly pear cactus. Hemp is one we're getting a lot of requests on. And so I just really want to say thanks for the support. OPP works with us very closely. We feel like we have a very strong partnership with them and they assist us in adding tools to the toolbox for the growth. So, thank you.

MR. KEIGWIN: Okay. I just got an email that the mic wasn't working again. So why don't we just do a quick sound check.

UNIDENTIFIED FEMALE: Sure.

MR. KEIGWIN: We're going to quickly open up the line and see if people can hear the discussion in the room.

UNIDENTIFIED FEMALE: I can hear you loud and clear.

MR. KEIGWIN: So people who are on the line, are you able to hear us?

UNIDENTIFIED FEMALE: Yes.

UNIDENTIFIED MALE: Yes, I can hear now, yes.

MR. KEIGWIN: All right, great. Thanks. All right. We're going to mute the line so we don't have interference. So, Sharon?

MS. SELVAGGIO: So, you know, I think I was about 11 or 12 years old when the EPA was created. And when I think about it in terms of sort of the America trajectory, you know, it seems to me that as Americans pursue, you know, happiness and freedom, the EPA and a number of the environmental laws that were passed at the time were basically put in place to ensure that, you know, freedom and happiness translate in many cases in this country to capitalism. And so making sure that people (inaudible) faced with this and the health of the people in pursuit of capitalism, freedom and happiness.

So, you know, the EPA has a really, really, really important mission and a role in American government and society. And I -- I have to agree with a comment earlier that the trust has been very compromised. And as an example, when we look at the Endangered Species issues, the EPA has had in front of it for 11 years completed biological opinions on Northwest Salmon that have jeopardy calls in them and

adverse modification to critical habitat. And for 11 years, EPA has not acted on those biological opinions with the exception of one, and has made no formal announcement about, you know, an alternative to any of those or the reasons why it's not implementing those.

I don't really know of any other governmental Agency that has flouted the Endangered Species Act in such a way. And it -- it really is scary, quite frankly. And so I just wanted to bring that to your attention because with regard to EPA's role in our society, we have to be able to trust that EPA is going to complete the process that the Endangered Species Act was designed to do and not just to sit on these recommendations forever and ever, or to wait for science to be perfected. It just is never going to be there. At a certain point, EPA has to act. Thank you.

MS. DUNN: I don't want to leave you without a response because I've been responding to most of the comments. But I appreciate hearing that. And maybe what I'd like to do is we can get a followup where you can kind of fill me in on these overdue BiOps and where they're standing. And hopefully I'll learn a little bit more about what's going on. So thanks for bringing it to my attention.

MR. KEIGWIN: So in the interest of time, maybe we'll take the final two cards that are up. So Jay and then Tim.

MR. VROOM: So thank you for being here. You mentioned the legacy of this advisory committee being in the 24-year range. I would have sworn it was longer than that, personally. So thank you for that sort of factual history background.

I'm here today representing both a legacy organization that nominated me to be here, which I retired from but I'm still a member representing a lot of those same pesticide registrant interests as a client relationship. I'm also here as a farmer from Illinois. And I would say from every perspective that I think I can represent being here as a member of PPDC that those interests in agriculture have confidence and trust in EPA. Not every decision, every day, but we have access and ability to have an open debate and conversation about those final decision outcomes.

We very much appreciate the fact that EPA and OPP interact with other federal agencies and state and tribal agencies as well, and that there's a lot of transparency around all of that. I also think that it's important that transparency be applied fairly and universally around sources of data. And there are a

lot of controversies around some of the products that have been mentioned, that you've mentioned here this morning around the data sets and the availability or lack thereof with respect to the fact base that drives ultimately EPA's decision.

So I think that there needs to be a level playing field and a level of trust that all of us should acknowledge and represent. And finally I'm really pleased that you've reinforced the importance of communications as a science. That is an important tool for EPA and all of us. And I know that Administrator Wheeler has said that repeatedly. It was one of his three platforms when he was deputy when a number of us had the chance to have dialogue with him. And I know that that commitment continues all the way to the top. So thank you for being here.

I also never remember an Assistant Administrator coming to this meeting and taking questions. So thank you for that as well.

MS. DUNN: Well, thank you so much. And I appreciate the multiple perspectives around this table from the registrants to the NGO community, to other governmental partners, to, you know, all different state partners. I see -- my vision wears out right past Walter. So I'm determined to never wear glasses.

Those of you wearing glasses can convince me otherwise.

So, no, I agree that diversity is important. And I've been impressed with our conversations with registrants when we have concerns about impact of particular chemistries on different habitats, different species. I have -- you know, again, I'm new to this field, but I have found the registrants that we've interacted with to be fairly flexible. It's usually not us informing them of something, but something that their own research and science has already kind of directed them towards and frequently they will come in with a proposal to mitigate something themselves that can either shape the scope of what we have to look at in a way that makes it more manageable. So I see -- I see collaboration across the different sectors and I appreciate that.

MR. KEIGWIN: And then Tim Tucker.

MR. TUCKER: Yes. I'd like to thank you for being here. It's been encouraging to hear your remarks this morning. In regards to increasing communication and transparency, I think that's really critical. And yesterday I mentioned in some of my comments regarding the report from the public health group that their key statement in their report was to

build the public's confidence towards EPA's approach by improving communicate quality, quantity and consistency.

And I think, you know, your role as a public relations kind of a person, you know, that if you could take that to key. Because when I go back and I explain to people what we try to do here, there's always a skepticism. And as I explained yesterday, the EPA's image isn't always, you know, the best. So I think it's great that, you know, if you can do that and work in those directions, it will be great. And I wish you luck.

MS. DUNN: Thank you. And, you know, one of my early meetings, we did get sued on a matter. It was not a pesticide matter. And our lawyers said we're ready to defend this case. You know, EPA has a great record, you know, very clear decision-making up to this point, and we're going to go into court and we feel really good about it. And they said -- and we don't get to say that about every case we have to defend. So it was a good reminder to me about the importance of the steps that we take being well documented, very clear how as an administrative Agency we get to the decision we make. At the end, there may be someone who does not like the decision and we can

litigate it. But our lawyers need a very clear path of how the Agency got from A to Z. And when we do that well, we're in -- we're in a good place for -- you know, still a debate, but we can defend our process. Our process has to have integrity. So thank you.

MR. KEIGWIN: All right. Well, thank you so much for joining us this morning. OK. We are going to transition into biostimulants.

MS. DUNN: Oh, biostimulants! Even better!

MR. GRAGG: This is Richard Gregg. I didn't get to --

MR. KEIGWIN: Oh, I'm sorry. So maybe you can take one more question. Richard Gragg from Florida A&M --

MS. DUNN: Oh, okay.

MR. KEIGWIN: -- is a PPDC member who's participating remotely.

MR. GRAGG: Thank you for your comments. And I just wanted to encourage the open communications and transparency especially around pesticides when it relates to environmental justice and vulnerable populations and health disparities. So, thank you.

MS. DUNN: Well, thanks for being on the phone with us from Florida. And I -- I really -- it's interesting, you know, my perspective on environmental

justice is -- has evolved in a lot of ways. You know, when I worked with all 50 states, some states really talk about environmental justice; other states talk about community engagement.

And I used to say there -- there's some commonalities there. What it is is making sure that there's a very clear way for the public to participate in your decision-making and to make themselves heard. And when I used to teach environmental justice at one of the law schools, I would give students extra credit if they could go to a public meeting. If they went to a public meeting, any public meeting, and this was in Westchester County, New York. And I just said, throughout the whole semester, pick a night whenever you want; look on the county website and find out what committees, (inaudible) committee, whatever committee, get yourself to a public meeting.

And the students that did it, nine out of 10 would come in and say I couldn't find it. One said I got there and got, like, you know, the hairy eyeball like what are you doing here; nobody ever comes to these meetings, you know? Unclear information about how to participate, not even a chair in the room for anyone to observe.

I mean, there was just -- and it was really to

get them to realize that we say we have this process of government where everybody is welcome to participate, but when you really try to do it, it can be unbelievably difficult. And this was for law students who were at the graduate degree level. I said, now imagine you didn't finish high school and you want to participate in a public hearing and you have child care issues or you don't have the internet. How are you -- how are you going to participate in government?

And so that's how I look at the EJ issues, is it about making sure there's an equitable and fair way for people to participate. So thank you for raising that and for being on the phone. You probably have a better view than us.

MR. GRAGG: No. Well, thank you again. And I look forward to talking with you more about it. Thank you.

MR. KEIGWIN: Thanks again, Alex. So I'd now like to invite Bob McNally, the Director of the Biopesticides and Pollution Prevention Division, and Russ Jones.

MR. MCNALLY: Yeah. Thanks, Rick. So let me start out first and just ask folks here, how many people don't know much at all about plant biostimulants? You don't really know much about the

term, just show of hands.

Okay, that's good. And how many feel you have a pretty good understanding?

All right, great. You know, for myself, when I started in this program five or six years ago, I had never heard this term. So this is really an evolving area. You think about pesticides, you think about fertilizers, and now there's this new field called plant biostimulants.

So as Alex alluded to, we put out guidance several months ago on this that we're looking for comment. This guidance is just articulating what our views on this subject have been. And I'll get to that in a second over the last five or six years since we've been getting questions.

That comment period will run through July 27th. We've extended it to give people more time to comment. And since we're in a comment period, our main goal today is really to listen to comments that you have and then try to clarify any questions you have about what we mean by certain things. So that's what we're going to attempt to do.

Now, before I turn it over to Russ Jones, who's our technical expert, there's sort of five things that I want to cover. First of all, in this briefing,

we're going to cover what they are, biostimulants, and why they're important.

The second point we're going to cover and focus on is, well, what the heck is their connection to FIFRA and pesticides? And that's really critical.

Third, we're going to try to touch on the perspectives of states that have an interest in this area, as well as industries who have an interest in this area.

Fourth, as Alex alluded to, we want to describe a little bit about USDA's role in this area and a report to Congress that under the enacted Farm Bill in 2018, USDA has to provide back to Congress by around Christmastime.

And then lastly I want to sort of cover a little bit about what our next steps are in the process moving forward. So, with that, let me turn it over to Russ, who's going to walk through some slides that we normally present to groups like this to give you an overview of those areas that I've just touched on. So, Russ?

MR. JONES: Good morning. My name is Russ Jones, and I'll be giving an update on our -- does it work? No?

MR. KEIGWIN: Maybe it's not charged. Did we

leave it on overnight?

MR. JONES: Or I can project. Can everybody hear me?

MR. KEIGWIN: Not on the phone. Maybe -- Do you want to sit down here?

MR. JONES: Okay. Can you hear me now? Okay. No?

UNIDENTIFIED FEMALE: I'm going to get a new microphone.

MR. KEIGWIN: We maybe left it on last night.

(Brief pause.)

MR. JONES: Okay. Can you hear me now? No? Hello?

MR. KEIGWIN: Maybe he can get it to work.

MR. JONES: Hello, can you hear me? There we go. I need to yell sort of like a rock star here. Okay. I'll get real close. So everybody knows who I am now. Let's get this working. Okay. There we go.

Okay. So I'll give a brief overview of what EPA's understanding of what a plant biostimulant is. And basically it's a fairly new -- well, not so new in -- ouch.

MR. KEIGWIN: Oh, hang on.

MR. JONES: It's a relatively new and growing category of agricultural products. It's comprised of

either naturally occurring plant growth substances or microbes, or a mixture of the two. Their intended use is to stimulant plant growth by several different means, primarily by improved nutrient water use efficiency, protection from abiotic stress, whether that be salt stress, cold stress, heat stress, water stress, what have you, and it could include the stimulation by plant regulator -- I think plant hormones and associated plant hormone-like substances. That's what we consider a plant regulator -- at least in the biopesticides area.

They are not considered to be fertilizers or provide any nutritional capacity to the plant, but they are -- they do stimulate nutrient use efficiency, and they're not used for pest control purposes. Because they can provide enhanced nutrient use efficiency capacities, you can apply these products with plant fertilizers to help with the uptake of those substances and thereby reduce the burden of agricultural chemicals in the environment. They're also attractive for sustainable ag programs and IPM programs.

Now, the biostimulants market, take these numbers with a grain of salt. These numbers here change. However, I will indicate that every time I update this slide, the numbers do get bigger. So the

latest thing I've looked at, the global market may be roughly $4.5 billion projected by 2025. This number is likely to increase. North American market might be expected to reach close to a billion dollars by 2022. North American market is the second largest behind Europe, worldwide.

I guess the question then is -- to be asked is why does EPA concern itself with plant regulators and why do we regulate plant regulators, including those things that are considered biostimulants? It has to do with FIFRA and the way the definition of what a pesticide is. The FIFRA definition of a pesticide includes plant regulators. So that's -- our authority under FIFRA regulates plant regulators as pesticides.

We don't regulate plant biostimulants, per se, because reason being is there is no definition in FIFRA of a plant biostimulant. So we look at those products that may -- those plant biostimulant products that may or may not fit within the definition of a plant regulator.

So let's look at the definition of a plant regulator in FIFRA. This is really instructive as to why we look at these things. It's any substance or mixture of substances intended through physiological action that either accelerates or retards the rate of

plant growth; accelerates or retards the rate of maturation, or otherwise alters the behavior of plants or the produce thereof.

Now, we interpret the behavior of plants as the growth habit. Is it a viney plant? Is it a short, stout plant; leafy, nonleafy? And if you apply a substance to the plant so that it grows in a manner in which it does not normally grow, then that would be a change in the behavior of the plant.

Now, it is understood that just about anything you can apply to a plant -- water, for instance -- will change the physiology of a plant and make it grow in a different way. So in order to not be seen as regulating everything under the sun, there are a number of exclusions from the plant regulator definition.

So if it's excluded from the plant regulator definition, it's excluded from regulation under FIFRA. So the following exclusions are found under FIFRA. There are plant nutrients and trace elements. And those are defined in the code as those macro-nutrients and micro-nutrient trace elements that are -- that support the normal growth of a plant and are there in a readily useable form.

There's this other exclusion from FIFRA known as nutritional chemicals. Oddly enough, the name is

listed there in FIFRA, but nowhere in FIFRA or in the Code of Federal Regulations is the term "nutritional chemicals" defined. So we really don't have an opinion on that at this moment. So it's there. We don't really have a definition on it. So we just move on.

Now, we do have plant inoculants. That's another exclusion from FIFRA. Plant inoculants are micro-organisms that are applied to the plant or to the soil that increase the -- or increase the availability of -- or stimulate the plants to more readily take nutrients up from the soil. So that's kind of a nutrient use efficiency thing.

We have soil amendments. Those are -- could be substances or micro-organisms that are applied to the soil that change the characteristics of the soil. So it makes it a better medium for plant growth.

And then we have this kind of interesting category called vitamin hormone products. Now, vitamin hormone products basically can include all those four bullets above it, any mixture thereof, including plant hormones. The caveat here is that vitamin hormone products need to be of minimal toxicity, usually in a Tox III or Tox IV category, and they are not to be used on food crop sites. So they can be used in ornamentals, turf, non-bearing trees, things of that nature, but

they cannot be used on food crop sites. But if you're within that vitamin hormone definition, you can freely make plant regulator claims without being subject to regulation under FIFRA.

So what is the purpose of our proposed guidance? It should be understood here that the guidance is not being more restrictive in terms of regulations, not intended to be more restrictive. It's not intended to be less restrictive. It's really a clarification and basically putting down on paper what we are already doing in terms of the regulation of plant regulators and provide clarity to the regulated community as to what we're doing. It's a legally non-binding document. And the document also provides examples of claims. Plant regulator claims that may be found on product labels and also identifies examples of non-plant regulator claims that we would consider not triggering FIFRA.

And it should be understood here these are examples. It does not cover the waterfront. There could be other claims that we have not covered or listed in the guidance.

So we go on to our definitions. Remember, as a regulatory Agency, we regulate on what's defined either in FIFRA or in the Code of Federal Regulations. Plant

biostimulants themselves are not defined in FIFRA. So as I said before, we don't regulate plant biostimulants. We regulate the plant regulators.

There is a definition in the recently enacted 2018 Farm Bill, as well as a proposed definition in the European Commission, who have been working on an update of their own fertilizer law since roughly the year, oh, 2012, I think, 2013?

So let's look at the definitions that are in the Farm Bill. And that is "a substance or micro-organism that, when applied to seeds, plants or the rhizosphere, stimulates natural processes to enhance or benefit nutrient uptake, nutrient efficiency, tolerance to abiotic stress, or crop quality and yield." Almost sounds like what our understanding of a plant biostimulant is.

There's a similar definition, again, in that European Commission Fertilizer Law Update. Their definition is very similar to the Farm Bill definition. It's "a product stimulating plant nutrition processes independently of a product's nutrient content with the sole aim of improving one or more of the following characteristics of the plant: nutrient use efficiency; tolerance to abiotic stress; and crop quality traits."

So note that in neither definition are they

really considering this to be a traditional fertilizer product, but that it's something that will stimulate nutrient use efficiency by the plants when these products are applied to plants or to the soil.

In terms of the expected benefits and costs after we finalize the guidance, this was a little bit of a harder nut to crack. We did our -- tried to do an economic analysis and we found it was really difficult to quantify cost savings or costs one way or the other. But it is noted that by eliminating ambiguity and providing a little more regulatory clarity, there will be savings in terms of having a more definitive pathway towards registration or determining which products are not going to require registration. And that saves both the regulated community as well as the state regulators and federal regulators.

So some perspectives we have obtained from the industry, as we've been interacting with the industry since the year -- again, since maybe 2012, 2013. Industry does seek clarification and guidance on the products that may or may not be subject to regulation under FIFRA. And there are some companies and individual groups out there that are seeking regulation under FIFRA. They do want to register a plant regulator product and get that EPA registration for

their biostimulant product.

There is -- as I said, not all biostimulant products would necessarily be considered plant regulators. And some of the industry groups do seek to create sort of a third-party certification process for these non-government regulated products. And they want -- it's called kind of this U.S. plant biostimulant verification program that's being kicked around between basically USDA and the industry groups, and it's more or less to create a certification process for these products basically to assure that they do what they're supposed -- or do what they're intended to do or what they claim to do; they have the components in there that they say is on the label and what have you.

So it would be a certification process that's acceptable across all states. It would establish standards and criteria for this certification process and also create a registry of these products once they have been certified.

Now, EPA's role in this will be technical and advisory only. There's not going to be any sort of regulation by EPA on this third-party process. And USDA will be taking the lead for this with EPA in an advisory role.

Also, I do put that bullet down at the bottom.

Of course, there's a smaller group of people who don't want any regulation at all, whether it be by the state, the feds, or any private organization.

As far as the U.S. states are concerned, of course as we've been -- as I've been stating all throughout this presentation, everybody would like regulatory clarity. So not only at the federal level, but also at the state level. The state's really -- when these products come into the states for their registration purposes at their level, the first thing they ask is does this product require registration under FIFRA? Is it a plant regulator or is it not a plant regulator? So we have those conversations quite often.

So, again, one of the purposes of the guidance here is to help the states understand what we would or would not regulate.

As far as USDA and EPA collaborating, we are under the Farm Bill, Section 9201. There's supposed to be a report on the regulation of plant biostimulants. That was supposed to be -- that is supposed to be completed within one year of the enactment of the Farm Bill. And the text that is in the Farm Bill basically says the report is supposed to "identify potential regulatory and legislative reforms to ensure

expeditious and appropriate review, approval, uniform national labeling, and availability of plant biostimulant products to agricultural producers."

Again, USDA will be taking the lead in drafting this report. They will do it in consultation with EPA, states, industry and any other stakeholders. This may or may not include that Plant Biostimulant Product Verification program I just spoke about in the previous slide. I think that's just -- that will be something to be determined. But, again, USDA will be taking the lead; EPA will be in more of a technical and advisory role.

Internationally, as I alluded to before, the European Union has drafted a definition and a -- they actually have a regulatory framework for plant biostimulants. They will be regulating these things under their proposed fertilizer regulation update. It's undergoing technical modifications now. I think it's getting close to completion here in 2019. I think it's -- the last slide or information I saw from that, I believe they're hoping to have this completion soon, maybe June of 2019.

If you go onto the European Commission website, it's a bit opaque in terms of the information they're relating to us. But as near as I can tell,

they want to have this completed by 2019. I believe there's elections coming up. So they're trying to get this done before the European Commission elections are completed.

Proposed implementation of this fertilizer update law will be in 2021.

Outside of the United States and Europe, it's really kind of a mixed bag as to how plant biostimulants are handled. There's -- depending on which country you're in, it's either unregulated, it's regulated under existing fertilizer regulations, or it's regulated under existing plant protection or pesticide regulations.

I'm not going to go through this slide line by line. But it's basically a listing of our stakeholder involvement since 2012. In 2012, I actually received a copy of this publication called the "Science of Plant Biostimulants." It was written by Professor Patrick Du Jardin. And he basically created this -- crafted this paper as a -- kind of for the European Commission. It was basically to support the role of plant biostimulants within their fertilizer law update. And I was one of the peer reviewers on the paper.

And basically in 2012, I provided my comments, sent them back and everything was off the radar screen

at that point. Long about 2014, 2015, we are now starting to make our initial contacts with the European Biostimulants Industry Council. This was technical meetings that we attended when we were giving presentations specifically on plant regulators. We also met with the USBC and the BPIA at that time.

And when I came back from these meetings, that's when I brought back the information. EPA, I think this is -- we need to start addressing plant biostimulants because these products are going to start coming in the door and we need to start developing some sort of way to see how they fit within our existing regulatory scheme.

So that is really where the genesis of the plant biostimulant or the plant regulator guidance started. So going now down to 2019, right now our guidance was posted for public comment on March 25th and we have now -- originally we had a comment deadline of June 27th. And as I understand it, as Bob just said, it has been extended up to the end of July.

So there are our next steps. We've already completed our final Agency review, our OMB review. As I just indicated, we're in the public comment period and June is now not correct. It is July. We're going to develop our response to the comments during this

summer, 2019. And our hope is that we can publish the final guidance sometime either in the winter or spring of 2020.

MR. KEIGWIN: All right. Thanks, Russ. Again, if you want to comment on this officially, you know, take a look at the document. We've kind of covered it just sort of superficially here. Basically it describes the categories that Russ has talked about. It gives examples of claims that would be relevant under FIFRA and claims that wouldn't be things you'd have to come in and get registered.

It also includes a list of previous things we've registered as plant growth regulators under the statute. States and actually EPA regions have found that information helpful because, again, as Russ highlighted, one of the goals is to help people in the real world sort of deal with these issues as they come up. Is something a fertilizer? Is something a pesticide? And where do these newfangled products known as plant biostimulants fit.

So, with that, let's open up any questions you might have about the guidance. And certainly if you want to make any comments, feel free to make them this morning. But also please remember to file them officially so that we can consider them in the official

record.

Nina?

MS. WILSON: Thanks, Russ and Bob. Good explanations. Every time -- it is a complicated -- it doesn't seem like it should be a complicated thing to try to understand what the different things are. And so I'm going to try to paraphrase, probably badly, but that was a lot of good information. There's a lot of different products that probably a lot of people aren't really familiar with on a day-to-day process.

But I really think a biostimulant is something like -- something that you would give your kids because you know it's going to help them grow well; it's going to help them digest something. I don't know, something -- some booster in their milk or something, whereas a steroid is something that is going to make them do something or build muscles that they normally wouldn't do under sort of normal conditions. So I don't know if that helps, but that's kind of where my mind thinks about the difference between what a biostimulant is and what a PGR - a PGR is going to do something that normally a plant wouldn't do under normal conditions. And so that is why it's regulated. Does that sound strange?

MR. JONES: No. It doesn't sound strange at

all. But I think it should be understood that there's a vast universe --

MS. WILSON: Yes.

MR. JONES: -- of plant biostimulants. Many biostimulants will be, as you said, they will fall outside what we would define as a plant regulator under FIFRA.

Other products, however, will have components in them --

MS. WILSON: Right.

MR. JONES: -- that are biostimulants. They may also be a mixture of components that are non-plant regulator in nature but also plant regulator in nature. So if I have these plant regulator components in them and they're making claims that would fit within that FIFRA plant regulator definition, then they would trigger regulation under FIFRA.

MS. WILSON: Right. So for decades and decades there are things now that we have come to understand are biostimulants that have been used in the industry forever and not been FIFRA regulated. And they may or may not have some level of components that might lend them to -- for people to think that they could be steroids, if you will, or they could be PGRs.

So -- and I just want to say really quickly, I really -- the industry really appreciates the brave

effort that EPA made in trying to define this because it is such a difficult thing. And, you know, we end up talking circles -- even when the industry was talking about it, we were just going round and around many times trying to get our hands around what actually we were trying to do and ask the Agency for clarification, because clarification is needed. You know, the states are -- you know, they have to deal with enforcement. And it's like I want to enforce this but I'm not sure what it is. And we're having issues at the port because when something comes into the port -- and these microbials have very short shelf life -- somebody looks at this at the port, you know, who doesn't understand FIFRA or biopesticides or been, you know, exposed to some of this explanation, and they're like, "I don't know, this looks like a pesticide," you know; where's the notification, you know? And so they ask and, you know, by the time you get your stuff out of port, it's dead. And so it really is -- it is really not good for commerce.

So there -- we really appreciate how you went through and talked about each table and made -- for all the different kinds of biostimulants and PGRs, you made comments on these are the appropriate claims. And I think that's really helpful and we really did think that having a claims-based document that explained

that, people wanted to see that in black and white. Right? It makes it -- it makes it more real to them. "Yes, my product does this; oh, yeah, okay, it's -- I guess it's a PGR, or it did this, so I guess it's not." And so that's very helpful.

But, however, table four, the infamous table four, I think looking at it somewhat out of context is confusing. And I -- again, my analogy here is that we have products that are at EPA and approved as inerts, and we also have products -- the same products that are approved as active ingredients. And the difference often is what the -- you know, they're the same thing, you know, but the composition is a little bit different; enough to make one an inert and enough to make one active ingredient, and then also the claims and how you use those things. So that's, to me, sort of an analogy of how I think about some of those products that are on List 4 that have been used without FIFRA registrations often for a long time.

And so we really would -- to parse out all of this -- and there are a lot of stakeholders besides the states and there's, you know, many industries and many people and hundreds of companies that are doing a lot of research. And they're doing a lot of research because we're seeing results. We're seeing results,

you know, where we're getting better plant health; everybody is understanding more about the microbiome, you know, not only within ourselves but within a plant has its own microbiome. So there's some very exciting stuff coming down the pike.

And we believe maybe that Table 4, if it's taken out of this document and we think about Table 4 as being a product that it depends on the composition of your particular product and the claims that you're making on your particular product then we can't really paint it with sort of a broad brush and make a table that says, you know, these are plant growth regulators because of the potential for dual use.

So -- and, of course, we want to be able to discuss that with you. And as far as the timing on the published guidance, you -- Russ, you alluded to the fact that the USDA is also working with industry to clarify what they believe is the guidance around biostimulants. Not PGRs, but biostimulants. And that comment is due to Congress in December. But the industry is working with USDA to develop a framework and get it on paper, you know, sometime around July/August.

So it would be really great to have the

guidance. You know, obviously you guys are working with USDA as well. But we believe that those should be aligned. And so having the comment period extended to, you know, July, would be very helpful because I think those documents can come together and then USDA and EPA can, you know, work cross functionally, which is what the industry would like. And, also, you know, make sure that the states and the people that -- the other stakeholders are aware.

MR. MCNALLY: Yeah. Thanks, Nina. Just a couple points of clarification for everyone else. So Table 4 was not in the presentation this morning. But if you look at the guidance I think I alluded to, that's where we list previous things that we registered as plant growth regulators over the past 20 years. So that's sort of a summation of all the ones that we have registered since the program's inception.

One other point I want to make to bring other folks into the discussion is I think industry is probably a better group to talk to than us. But I think there is some evidence that may suggest that if these plant biostimulants are used, a farmer may ultimately use less fertilizers, less pesticides. And so in theory I think there could be some benefit sort of more globally than just to the farmer.

MR. KEIGWIN: Okay. Tim?

TIM: Thank you. I was just wondering if you might have a few examples of what these naturally occurring compounds are and if they are occurring in their own species; if they're species specific, you know, much like the IGRs are, and then enhanced synthetically or how these naturally occurring compounds are going to be derived and put on the market.

MR. JONES: Okay. Essentially many of the naturally occurring compounds are found in plants. They're produced by plants themselves. And that would include your typical plant hormones. If you remember your plant physiology, Bio 101 class way back when, things like auxin, cytokine and gibberellins, they're not species specific. They're found in almost all green and growing plants.

Many of these things are produced by microorganisms. They have a different function in a microorganism than they would in a plant. But the fact of the matter is they are molecules that are identical to those found in plants and have activity the same as the molecules that the plants themselves produced.

But I don't know how many people have the guidance in front of them and have Table 4, but

these are, again, all substances that are produced by biological organisms. And I have activity -- plant regulator activity as defined in the plant regulator definition under FIFRA section 2V.

MR. McNALLY: Does that help?

TIM: Well, I'm not seeing Table 4. Where do we get that?

MR. KEIGWIN: So what we can do is we can send around a link to the guidance that's out for public comment to everyone on the PPDC just so that you have it.

MR. MCNALLY: And after the break, we can show you the table here if you want to take a look. Jay?

MR. VROOM: Yeah, thanks. So I think Table 4 has caused some states to be confused and actually issue stop sale on some products for this market year. That probably wasn't the intent of EPA. And so it's an example of how all of us need to be careful around some of these communications and proposals.

I agree with Nina. I think that more time for the comment period, if you could push it another month into the late July time frame, would allow for industry, EPA and USDA to have greater opportunity for convergence. And we know you're considering that.

And then lastly I think the Farm Bill as

enacted is pretty clear with regard to the next steps delegating authority to USDA, but with full recognition I think from the regulated community that this is not the first time that there have been questions about what box does a substance fall into with regard to OPP jurisdiction and regulation, and -- but it is probably the first time where there's been so much potential overlap with not only the regulatory authority that may evolve or not at USDA, but certainly has been repository at the state level with regard to fertilizer nutrient registration.

So thanks for the care that you've brought to this so far. A lot more miles to go. But we appreciate, again, the opportunity for access and transparency.

MR. KEIGWIN: Liza?

MS. TROSSBACH: Thank you. Just to follow up on the comment regarding pesticide regulatory officials, I think one of the main concerns are the claims that the products are making. There's a very specific definition for pesticide, substance or mixture of substances that will do any of this list of actions.

And many of these products the states are finding have claims that seem to at least infer that they are -- there's a pesticidal quality to that

particular product. And so I would just offer that the claims portion of the guidance -- and I have not -- I looked at that in great detail, really is important and it really is important for, you know, the industry to, you know, to follow.

The other thing is that states also have, in addition to Federal law that they follow, there are state laws as well. And so it is possible that you will have something that in one state will not be considered a pesticide but another state may interpret it as a pesticide. And states are allowed to be more stringent than the federal requirements. And so I would just offer that.

The other thing is I think the list of compounds, some of which, you know, can be -- I think the comment was made it could be inert, it could be an active ingredient -- some of those materials do have pesticidal qualities by their very nature. So when they're put into a product, whether there is a claim that it's causing a pesticidal action or not, there is some concern that is it, in fact, a pesticide? It is being marketed outside of the regulatory process, there are many state agencies that go to consumer protection issues, level playing fields and those types of things.

So there's a lot of things that state lead agencies and pesticide regulatory officials look at and that I think need to be, you know, worked out. I think that the workgroup and the guidance is great. I hope that as we go forward that state pesticide regulatory officials are more heavily involved in that because we have a very important stake, you know, in this process, as well, and in ensuring the products that are supposed to be out there that are tools are certainly out there, but that, again, we are protecting the consumer and we are ensuring that things that are, in fact, pesticides are being utilized as pesticides.

For example, if you have something that says it enhances growth, but really what you're saying is it enhances growth by a pesticidal action, then you're a pesticide. And that's how, you know, we currently look at that. And so I appreciate this discussion.

MR. KEIGWIN: Can we check on the phone for Andrew, Richard or Iris, if they have any questions or comments?

MR. GRAGG: I have a couple questions.

MR. KEIGWIN: Richard, go ahead.

MR. GRAGG: Yes, thank you. One, are these biostimulants -- can they be applied through the UAVs? And, two, are there any known human health effects of

biostimulants? And, three, can they be applied in conjunction with traditional pesticides, either together or from a mixture?

MR. MCNALLY: So this is Bob. Thank you for those questions. Let's try to take them one at a time. I think the first question, how might they be applied. And the industry can chime in as well. But my sense is they could, in fact, be applied to a variety of means. Is that correct, Russ? So, yes, to answer the first question.

Let me cover the third and then come back to the second. I think the question is could they be applied as a mixture. To the best of my knowledge, that can be allowed. But as I think Liza mentioned, if there are -- and let's say they're not pesticides, but if they're pesticides that are being applied, those pesticides have to comply with the label.

And can you repeat your second question again, please? I missed that.

MR. GRAGG: Are there any known human health impacts or effects of biostimulants?

MR. MCNALLY: This is Bob. I think when we register a pesticide that is a plant growth regulator, as Russ can attest to, we go through a full litany of different studies and data requirements that have to be

met and then we make -- as Alex said earlier, sort of a safety determination.

So when something is a plant growth regulator and it meets those criteria, we do a full, you know, human health and ecological risk assessment. I can't speak to, you know, whether biostimulants that don't meet that standard have any issues associated with them. I may be able to ask the folks from the industry who are more familiar with that. In fact, they may be looking for some sort of certification program to take a look at that so that the public is assured that the product is safe and efficacious perhaps through a private sector verification program or perhaps if USDA does something.

Nina?

MS. WILSON: Yes, indeed. And I think you'll hear some public comments about that maybe later on. But that is one of -- one of the things that you pointed out is that, yes, maybe because the line is not black and white and you're on one side, and certainly characterization of your product needs to be done for you to determine really what side of the line that you're on, and one of the things that the industry is doing is trying to certify, you know, and do global certifications through third-party certifiers to make

sure that the composition is what it says; to make sure that the products do what they say they do.

Does that help? It's probably going to take a while.

MR. GRAGG: Yeah, a little bit. Thank you.

MR. KEIGWIN: Okay. Liza?

MS. TROSSBACH: Two final comments/questions. Some of the products that are being seen by states contain microbes. And I think microbes were mentioned before. And so I think the question is, has or will EPA be addressing microbes in this whole discussion of biostimulants, and kind of how you see that going.

And then the second thing is can you provide additional information about the third-party certification process? Who -- who is going to clarify or who's going to establish the criteria for that third-party certification? You know, what is that going to look like? You know, so we can be aware that obviously states that are forced to regulate industry, you know, what does that mean exactly? You know, where is that information going to be available? You know, how are we able to confirm that? Thank you.

MR. JONES: In terms of the first question about the microbes, even though -- except for maybe in certain spots it wasn't specifically said that these

were microbes, microbes are included in this. In fact, I remember having a conversation with our Office of General Counsel and the -- in the FIFRA definition where it says "substance or mixture of substances," I was informed that that included microbes. So I hope that helps.

So, yeah, just because you don't see the word "microbe" maybe throughout the document does not mean they were specifically precluded from the guidance. They are included in the guidance.

MR. MCNALLY: So, Liza, on your other point, so what EPA -- just to kind of summarize, our job is if it's a plant growth regulator, you come to us. And the guidance intent is to clarify when you have to come to us and when you don't.

Now, when you don't raises the point you made about a third-party certification program. That is a work in progress. I think the states are part of that effort. USDA has been very inclusive. And that will be part of the report to Congress.

So if you don't meet the criteria to come to us -- and, believe me, Rick and Ed can attest, we have enough work, we're not looking for more stuff to come other than what's covered under the statute. So if you're not covered by us, I think the point of that

report to Congress is to lay out the possibilities for what a certification program might be that might be done under the auspices of USDA; might be done through a third-party private sector group. That's sort of left to be decided or written.

MR. GRAGG: This is Richard. I have one other question if I may.

MR. KEIGWIN: Okay, Richard. Why don't you go, and then I think we'll close up this session with one last comment from Nina.

MR. GRAGG: So my question is how long do these products live or survive in the environment? I mean, do they -- do we need to be concerned about them moving into the aquatic system runoff from crop lands into the aquatic system? You know, how -- how long can their effects last in these other environments or are they just a short -- very short half-life?

MR. JONES: Okay. Well, first I can speak to the naturally occurring plant hormones. They're fairly labile in the environment. They're not really long lasting. They're already in the environment as a matter of fact. I mean, they're naturally produced by plants. They're there. The ones that are applied exogenously to plants, at least as plant regulators, are very short-lived in the environment. But we're not

-- we're not putting anything into the environment that isn't already there.

As far as microbes, again, these microbes are those that are present in the environment. We're not talking about GMOs. We're talking about isolates and strains that are already there that have specific effects and are identified to have specific effects. Being a microbe, of course, microbes live and grow and reproduce in the environment. So it would be a little bit tough to give you an idea of what a specific half-life would be on a microbe.

MR. GRAGG: Okay. But your -- but your -- I would have to take issue with your statement that -- well, at least the way it's coming across to me, that because they're already there then that's not an issue. These are products that are being extracted from their natural environment and then we are putting them or placing them in other situations. And as far as the microbes, microbes grow in communities, in mixtures. So when we isolate a certain one that may be natural and we compound that or grow it up and put it somewhere else, that doesn't mean it's not going to have any negative impacts.

MR. JONES: Okay. I can only address those things that we have looked at as either biochemical

pesticides or microbial pesticides, especially those that are used as plant regulators. And we have already gone through a series of safety assessments for those substances before they were registered.

As for those substances that are outside the FIFRA arena, I would have just to defer to the industry themselves on the use of those products. Again, I can only attest to the safety of the ones we've looked at, reviewed and assessed for human health and the non-target effects. And, again, we've assessed those fairly well for safety.

MR. GRAGG: But do those non-target effects include the microbial communities in the soil where the crops are already growing? Are you looking at non-target effects on the existing microbiomes?

MR. MCNALLY: Yeah, Richard. This is Bob. We can maybe talk to you separately to go through how we do our assessments for microbial and biochemicals. But, yes, I think the answer to your question essentially is yes.

MR. GRAGG: Okay, thank you.

MR. KEIGWIN: Okay. We'll close out with Nina and then take a short break.

MS. WILSON: Yeah. So just to address the last statement about what do the commercial people do

that aren't addressed by EPA. But the biggest challenge is making sure that the microbe is in a delivery system that does last in getting it to the plant, you know, and how it needs it. And so the challenge isn't -- you know, the challenge isn't making sure it lasts long enough to get it there and get in the formulation and it's not had a -- is it going to go away? You know, if that makes sense. It's just -- they're living organisms, yes, but they live in a very sort of finite area and don't last that long oftentimes.

MR. KEIGWIN: All right. Thanks, Bob and Russ, and thanks for everyone for participating. It's 10:30. Let's regroup at 10:45. Thanks.

(Brief recess.)

MR. KEIGWIN: So for this, what -- in the interest of time, I think what we'll do is we'll combine the last two sessions. So as you know the charter for the PPDC expires later this year. And in addition, all of your terms expire later this year. Some of you are eligible for renomination and reappointment, and others of you are -- have hit your six years and we'll talk about that in a little bit.

So every two years when we go through the re-chartering process, one of the things that we like to

do within OPP is to take another look at the charter, see what has been accomplished by the PPDC over the last couple of years and think introspectively about how we could better engage you all, better take advantage of the time, effort and the energy that you put into participating in this meeting and giving us advice.

One of the things that in beginning to do that that we realized over the last month or so is that we've not ever really asked that question of you all. And so since you have been so engaged with us over the last two years, so as we go into this re-chartering process and building off of the comments that Alex shared with us earlier this morning, we wanted to get some input from you all. Not so much on the charter, per se, but really on based upon your experience how do you all think that we could strengthen the effectiveness of the group; how could we better engage with you. And so I'll leave it there and kind of just open it up to the group.

Okay. Amy Liebman and then Amy S.

MS. LIEBMAN: Well, thanks for throwing this question out to us. I think it's a good question. And I have, you know, for varying things been in different roles on this committee for a while.

You know, the first thing that I think that, you know, in the spirit of Alex and in the spirit of, I think, the intent of the PPDC, is we really need to look at the stakeholders around the table and are we well represented? And if we aren't getting the stakeholders here, what are the barriers to getting them here?

So I look at sort of, well, right now we have officially one farm worker representative, which is Eunice. I'm under the public health umbrella. We have very few, you know, environmental organizations. And so, you know, it's -- it's not -- it's not a balanced discussion that we have. I think, you know, I'm a strong voice for some of the things that I represent, but I'm just one voice.

The other piece that I am really confused about that I think would help with some clarification is that when we go around the table and we say, you know, I'm here representing this; I'm here from this organization, indeed I am here for Migrant Commissions Network. But I am told that I am not representing Migrant Commissions Network, per se. I'm supposed to be the public health representative.

So I'm finding it confusing when we talk about sort of what our different roles are, like, are we

representing the industry that we work for or the Agency that we work for, or are we representing this topic? And I think that there seems to be some confusion sometimes in sort of our comments and where that's coming from. So that's just a point of confusion that I think would be helpful to clarify.

And then the last thing I think that would be really helpful is a much more transparent process in terms of the agenda. I just feel like I sort of put agenda suggestions out there and they go into some dark hole and they're ignored or I get a one-pager on them. So that's not transparent. It's not helpful. And it doesn't encourage further participation.

So, you know, those are -- those are just some initial comments. But, again, I appreciate you opening it up and getting some input.

MR. KEIGWIN: Thanks. Amy S.?

MS. ASMUS: I have a couple points I put down here. One, I think it's good that we meet at least once or twice a year face-to-face around the table. I don't say this very often, but I agree with the other Amy that there needs to be a representative of the stakeholders. We deal a lot with wicked issues in ag and it's not just the practitioners that have to deal with the issue. There's a lot of stakeholders. And

whether we agree or disagree around the table, I think it's very important that we are available and open to listen to other issues that might not be consistent with our perception. So I think that's excellent.

I find it frustrating at times that some of the issues come and go in between that calendar event that we have our meetings on. So I personally would like to see maybe more communication, however you define that communication, in between the time so that other than public comment periods we would have some input into some of the issues that fall in the cracks of the calendar dates of the meetings.

I think -- we talked about it a little bit yesterday. I think the workgroups or the subcommittees as they are in the charter are excellent. The public health workgroup has brought a lot of perspective from those people that work with it day-to-day to this group that this group does not have time to explore for themselves. And I'm excited at the possibility of forming another workgroup around the PRIA 4 set-aside topics. I think that really when you can incorporate the expertise of people around the room, all stakeholder expertise around the room, into groups that are very focused with a goal, really bring some benefit back to this group so that we can comment on something

that's not just a blank page; comment on something that's had thoughtful work put into it.

We do really -- at least I do, I think some around the table agree, we need charge questions and support material much earlier. Amy had kind of alluded to that. I represent many different groups here. I was nominated by the Weed Science Society. I work with Ag Retailers Association. I'm a retailer myself. I work with the Certified Crop Advisor Group. And I do like to send out that meeting agenda and get feedback from those people that put me here as a voice. And I can't do that when I get it Monday morning, especially when I come from Iowa and there's many other meetings that are set up around my trip into town that -- it's -- I just need them earlier. I would request them earlier so that we could really have some thoughtful feedback and not just what do I think today before I sleep on it and have to comment again tomorrow.

And the other thing I really loved at this meeting was the introduction of Alex Dunn. I wish that there was more opportunity for this group, especially since we're an advisory group or discussion group, to know the people that are the EPA that serve us and our needs as stakeholders.

And so I would encourage you, whether it's

through those inter-meeting communications or at the meetings, too, to really bring forth some of those partners that we work with in the EPA that we don't necessarily get to meet through the meeting process. Thank you.

MR. KEIGWIN: Charlotte, then Allen, then Pat.

MS. LIANG: Okay, thanks. And I also say thanks for including us in the agenda. And I'm going to be redundant from what Amy just said. I just want to reinforce some of her comments because she actually conveyed it very nicely.

But I know a lot of work goes into preparing for the PPDC from EPA's end and from some of the other speakers, and it's obvious the quality of information is really good and I think it really helps us understand the issue. And if that information can be provided, you know, even two to three weeks in advance -- I know that's kind of difficult, but it really does help us come prepared and be able to vet out some of those charge questions with the stakeholders that we represent.

So I'd really like to support that idea. I think it would be really, really helpful and useful and maybe would avoid having even some of the workgroups that, you know, are being suggested. I mean, I think

some workgroups are really necessary in some of these cases for sure.

And then in the event that any of us are not able to attend in person, we've been able to gather the input. At least we can get it to you somehow in advance of the meeting or share it with somebody else that can maybe speak on our behalf. I think that's it. So, thanks.

MR. KEIGWIN: Thanks, Charlotte. Allen?

MR. MCLAURIN: Thank you, Jim. Jim, this has obviously been a learning experience for me for the last four years, six years, 20 years, however long it's been. But, anyway, I appreciate the opportunity to have done it and to be here. And I want to thank Amy for her comments.

I do think you probably need some more producers here to kind of learn from the people here that are educated in environmental issues that we're all facing. I'm fortunate, I've had the U.S. military backing me up this time, so I felt pretty good. I wasn't here by myself.

But, you know, one thing just thinking out loud is the possibility that some of these people I'm sure around the table have never been on a real working farm and see what we're doing and what we're facing

every day. Worker protections in August, you know, it's tough to wear those suits all day long. It's just -- you know, we've got to make them available. We encourage them to wear them. But there are times that it's just impossible to do so.

And I just -- you know, if you can tie something in, a day trip, see what the National Cotton Council and farms around here within 40 miles, cotton farms, and just a possibility in the future of getting individuals out on the farm, see really what's going on. Thanks.

MR. KEIGWIN: Thank you. Pat, then Jay, then Dan.

MS. BISHOP: Yeah. Reiterating some of the stuff, but also adding to that. I think, you know, we only meet twice a year and, you know, six months in between meetings is a long time where we don't see each other, we don't discuss things with each other. And I -- and certainly there's a very diverse set of subjects that's covered in these meetings. I mean, there's things that I'm interested in and then there's things I know nothing about and I feel like I can't participate really.

But I think like the subgroups or the working groups, there's a way to have kind of standing groups

that, you know, people that are interested in a particular subject area. I know when I was on the Tox 21 group, I felt like, you know, I was working with people that were interested in my area and we could give feedback to EPA. I know it was on a specific topic, but if there was some way to try to meet either by phone or in person in between meetings, you know, sort of subgroups of people that could meet directly with EPA and go over certain topics, I think that would be really helpful if we -- you know, if there was some way to set that up.

And just -- I guess, you know, what some people were saying, add more -- if environmental issues are a big part of this, maybe more people in that area should be present or more producers should be present. Again, what Amy was saying of getting a better or a more representative balance of people sitting in the room here that could add to the discussion. So that's what I have. Thanks.

MR. KEIGWIN: Thanks, Pat. Jay, then Dan.

MR. VROOM: Thank you. Rick, I think there's an ebb and flow that you've seen through the history of PPDC that probably is driven somewhat by the priority issues that are in front of the Agency. I think the ability to be more flexible around agendas like was

reflected in my view of the approach to the two major issues that were on our docket yesterday with a lot of good external presentations is good. But that means that you're challenged to try to get outside speakers to submit information in advance and that ties your hands.

So I think we need to -- as members today of PPDC acknowledge, that you don't control everything that is related to the preparation of the agenda even for this meeting. And you're also at that discretion of those who participate that aren't part of PPDC to bring quality information here. So it's not any one single entity's fault as to how far in advance we get the information, and I think the priority of having good information and good presenters outweighs some of the offset of maybe getting things closer to the point of the meeting.

I also think taking a revisit strategically toward the balance and composition is appropriate. It's not the first time that this has been discussed. In my recollection, it's been discussed every time this topic has come up as the charter had to be renewed. So that's fine and good.

I would advocate that you consider creating at least an outline of kind of minimum criteria for

nominees for PPDC so that people that come here and participate as members are able to be able to interact with each other and the Agency on a more common level of experience and background. It wouldn't probably be appropriate for that to be a hard and fast test, but at least an outline of criterion for candidacy would perhaps be more helpful as you go about figuring out who will be the nominees and those that will be put on the PPDC for the future. Thanks.

MR. KEIGWIN: Thanks, Jay. Dan?

MR. KUNKEL: Thanks, Rick. I just really kind of echo what has been said already. But I think getting more information in advance. I did appreciate getting emails kind of throughout the year where it would get sent to the PPDC about, thought you may be interested in this. It was nice getting those. I'd like to see more of those. Maybe having an interactive website and maybe that will help us communicate more throughout the year when issues come up.

And, also, just thinking maybe a formal type of questionnaire. We had the slides. We had a number of questions on them. But we didn't always really answer those questions. So maybe a -- either a formal process on how to improve the committee, but then also with regard to some of the slides and some of the

questions that were on there so we could formally respond. And we know your emails, we know Shannon's email. So we can send them there, too.

And then finally I thought, yeah, Alex -- having Alex here was great today. I guess if she came yesterday, then she would hear through our introductions who we were. But I thought it would have been nice if all of us could kind of introduce who we were and what sector we were representing.

MR. KEIGWIN: Lori?

MS. BURD: Thanks. So I want to talk about diversity, equity and inclusion in this room. I'll start with something positive to throw you off guard a little bit since you won't be expecting that from me.

We do a good job of having a pretty decent gender balance in this room. So that's one thing that's going well. The racial makeup around this table does not reflect our country, and we should be looking at why that is. We could do better on that.

And class. Are we representing a diverse array of classes. Those are just, you know, a couple of the categories of diversity that I'd like us to think about. And I'll talk about class a little bit more. As we talk about equity, who has access to this meeting? I think we would have a lot more diverse

voices if people could get here. Not everyone can put a couple hundred bucks on a credit card in order to make it to this meeting. And we need those voices of people who can't do that to get here and we need to figure out how to make that available for them. You know, a lot of us that are here are supported by large organizations. Not everyone, but some of us. And so we need to think about who can come, who has access to this Agency, who is meeting with you all regularly and who only has a voice when -- if and when they come to this table.

Inclusion. Who does and who doesn't talk around here? There are a lot of people at this table who never talk. And I'd like to hear what those folks have to say as well. And I say that as one of the more vocal people around this table. I'd like to hear from more voices here.

The makeup of this group, I want to echo some of the comments that have been made. We have very few people representing the public interest community. I think there are some reasons why. I think there are reasons why when I encourage other people in environmental groups to want to come, they don't want to come. And we should -- we should do some soul-searching as a group about, you know, how effective can

we be without some really key, important voices here. You know, and I can list what those are or we can, you know, reflect on it more.

The content of what we talk about. If we are truly a dialogue group, then we'd like to hear more from EPA. It seems like it's -- you know, we're getting information about your processes on highly noncontroversial topics and some slightly controversial topics. But the really hot topics of our day we're reading about in the Federal Register just like everyone else. We're not actually having robust discussions about things like the revised approaches that Alex mentioned are coming out soon. Without having frank discussions on those hot topics and without having many of our agenda items accepted over and over, it feels discouraging.

So we'd like to be queued into those actual processes as well. Thanks.

MR. KEIGWIN: Sharon?

MS. SELVAGGIO: I'd like to say, I mean, I really appreciate the opportunity to be on this group. I've learned a lot. There's a lot of different stakeholders represented in this group. There's been a lot of topics. It's been very educational. I've really appreciated that.

I do want to echo a couple of other comments and then bring up a couple of things that haven't been brought up. The absences that have occurred as some people have moved on to their jobs -- moved on to different jobs, has left more of a gap, especially in the environmental side than I think was originally intended to occur.

And it's not really clear to me why those absences are not filled. I think there needs to be a process where if we lose a member because they die or move on to another job or whatever that we actually fill that absence and not wait for two years to go by.

So it seemed to actually work a little differently in the past, and so I'm just confused about the process. But I think we need to maintain, as many people have said, a diversity and a balance among the members of the group.

Another thing I'd like to talk about is basically, you know, there's a lot of avenues in which EPA gets commentary from different stakeholders. And one of them is the public comment process. You have scientific advisory committees. You have us. You have meetings that, you know, happen with you as staff with various people. And, to me, it's not really very clear where the dividing line is between our role and those

other avenues.

And so to sort of echo something that Lori M. just said is that, you know, sometimes it seems as if we're being brought the less controversial topics. And I'm just not really clear. Some of these emerging issues and stuff like that, I think it's great that we're talking about them when they are emerging. But there are obviously some really big topics on the table from time to time. And it's not clear sometimes why we don't really understand what's happening sort of behind closed doors, so to speak. The updates don't always really tell us much.

And so I guess I'd just like a better understanding and maybe some cross-fertilization between this group and the scientific advisory committees and so on and so forth. I'm not quite sure what the solution is, but some people have mentioned more regular updates perhaps between the six-month meetings. You know, kind of trying to really understand how do we differ from sort of a public comment period. So that's one thing.

I think when I look at the EPA's work with regard to pesticides, I think the process of risk assessment is obviously extremely central to what -- to EPAs decision-making. And those risk assessments are

usually posted and available to the public for comment and so on and so forth.

But because these are so incredibly important to the decision-making process, for pesticide registration especially, I think it's just really important that this group understand those processes and we spend more time talking about what those processes are. And EPA sometimes changes the processes, the assumptions, the model, et cetera, et cetera, that go into those. I think we really need more information shared in this group about that because the decision-making is supported by those risk assessment processes. And a lot of times we learn more through the news than we do -- you know, with trying to dig through these lengthy technical documents, you know? So I would suggest that that be a little bit more central to some of the agendas.

The last thing I just want to mention is that I think we need a better understanding and more information about the relationship between OPP and the EPA as a whole, other branches. You know, budget and staffing is always a really -- having been a federal employee before, you know, I mean, that really influences what an Agency can do. And some people are saying that because there's been such a drop in the

scientific staffing in the Office of Pesticide Programs that the quality of risk assessments has really declined.

And I think that it would be really helpful for us to really have a better understanding of that. You know, what the trends are in your budget, staffing, you know, who the faces are at the top and, you know, in each program. So I just think that that is really important. It usually goes unmentioned. But we have to have quality staff work done in order to have quality decisions. And so I think this group needs to have an understanding of that, too.

MR. KEIGWIN: Let's open up the line for Iris, Andrew and Richard to see if they have any --

MS. FIGUEROA: Go ahead, Andrew.

MR. KEIGWIN: Okay. Andrew, why don't you go, and then Iris.

MR. THOSTENSON: Yeah. My concern obviously is lead time on some of these topics that are being brought forward. Typically what I would like to do with my organization, AAPSE, is to be able to send out what the agenda is going to be at least a week or so ahead of time so that I can ask the membership if there are any specific items that they really want to reflect upon so that I can, you know, speak a little bit more

universally about what AAPSE is thinking as a group rather than just what Andrew is.

So I would appreciate that. There were some earlier comments about transparency on setting the agenda. And I don't know how to attack that problem. But I think that the agendas -- at least understanding what is, you know -- what the criteria is behind what's being put on the agenda, I think would be helpful. So that's all I have for now.

MR. KEIGWIN: Okay. Thanks, Andrew. Iris?

MS. FIGUEROA: Thanks. And thank you for the question and the conversation. A few thoughts. Echoing what other folks have said, I think that the balance issue is really important. And I think in order to achieve that, it's really -- it would be really helpful to have a sense of sort of objective standards of what that balance looks like because we do get a list of who is currently in the committee. But that doesn't necessarily reflect what we would ideally like it to look like in terms of balance. So that would be helpful to help us work towards that.

I think the vacancy issue, as I think Sharon said, have also sort of exacerbated that and it seems that if the idea of the PPDC is to have as many stakeholders as possible at the table, then we're kind

of shooting ourselves in the foot if we're not filling those vacancies with people who can represent those viewpoints that for whatever reason are not able to be at the table at that time.

And similarly, you know, we all make our best effort to be there. But we all have other roles and other work that we're tackling. So there might be a situation where despite our best efforts we're not able to be there. So having the opportunity of somebody from our organization who's also a representative to fill that space, obviously, you know, with advance notice and all of that and making sure that's somebody who's qualified to be there I think would be helpful as well. And as I understand, it's something that has been done in the past. So I'm also a little bit confused about why that's not feasible anymore.

The issue of lead time and having the information before, again, recognizing that there's challenges and that the Agency can't control, you know, all the different parties. But to the extent that we can at least try to have some of that information available, that will make our feedback that much better.

I also had a question and was hoping to get some clarification about the agenda topics and

the issue of rule-making specifically and what is the criteria around that and the timing of when an issue can or can't be discussed as it relates to rule-making.

And then my last point -- and Jay mentioned, you know, the opportunity to be on the ground and visit with farmers, et cetera, and this is a broader issue than the PPDC. But we feel that it's really important for the Agency to be on the ground talking not just to farm producers and employers but also to farm workers and organizations that serve them. Thank you.

MR. KEIGWIN: Thanks, Iris. Liza?

MS. TROSSBACH: Thank you. I think a number of the comments that were made were, you know, absolutely appropriate as far as getting materials in advance and those kind of things. And certainly, you know, balancing the group.

Just, too, to kind of ask or suggest. One is as new members will be coming on, I mean, I would like to suggest that there's some kind of onboarding process. There's a document that's included in our packet that talks about PPDC, what the expectation is, what, you know, the duties of the members are, et cetera; what groups are represented at the table.

There are thousands and thousands of groups.

Obviously at some point you can't have all of them participating, you know, in this venue. There are other opportunities as well. But certainly a lot of that I think is in here, but I think it's worth the discussion. But maybe some onboarding, you know, would be helpful as -- you know, as new people come in.

And then the other thing that I wanted to mention, based on my experience here, I've noticed some topics come in without adequate background information being provided to all the, you know, participants. Obviously, everybody has their area of expertise; everybody understands certain aspects of different topics. But I think sometimes some background information more than is currently being given not only in advance but in the meeting would be helpful. And that's not only for this group, but also for the working groups.

I had the experience, just as an example, with a pollinator protection plan metrics group. They did a lot of work. But it was -- it seemed to me that they didn't understand the impetus for the plans or how they went about being developed.

So while at the end of the day the product came out, I think it might have been more productive earlier on if they had understood how they were

developed; they were voluntary, you know, those types of things. A little bit more background information for those that weren't as aware or understand that process as much. So that would, you know, just be my two suggestions.

MR. KEIGWIN: Thanks, Liza. Any other --

MR. GRAGG: Yes. Richard Gragg.

MR. KEIGWIN: Please.

MR. GRAGG: Thank you. Well, I agree in general with everything that's been said prior. I do want to focus on that our makeup or criteria for makeup should be to achieve -- or should take into account who our target audience is. And I think we -- I think that should be part of the criteria of who ends up on the board.

Okay. And along those lines as well, in terms of getting more voices or more representations from who the stakeholders are, I think the presentations that happen is another way to do that, to get different viewpoints and different opinions before the PPDC as far as what our topics are.

I think also that another way to involve more stakeholders is to figure out what activities that the PPDC may get involved in or have us be involved in between the -- during the six months between the

biannual meetings.

What was the other one? And I think if the PPDC and EPA's really committed to transparency in communications, I think -- I think we should see that in the charter -- in the new charter and in the makeup of the PPDC and who's included in all of our activities.

And then I do want to just, I guess, reiterate this issue of the significance of the risk assessment and that we should get more information about that for the PPDC.

And I just want to come back to my opening statement. I think the makeup of the PPDC, I think the more diverse in terms of what people know, where they come from, who they represent, is going to give us a better output or better information to the EPA. We just can't have one level or people who are all knowledgeable about EPA and all the regulations. I don't think that's going to give us the results of what we need as far as the PPDC. So, thank you.

MR. KEIGWIN: Thanks, Richard. Any other feedback people want to share?

(No response.)

MR. KEIGWIN: So thank you to everybody who did share. I think -- I'm not going to capture

everything in what I say here. But I think we heard a lot about balance and composition of the group that we need to be considering as we think about our outreach plan for recruitment for the next round. So thank you for that input.

A number of very good suggestions relative to better planning and better preparations on our part so that you all have more time to think about what we're putting before you, the areas where we're seeking advice, but also give you time because you do represent broad sectors of people, even though you do bring your own specific expertise to the table. But you need time to think about that and you need time to engage with others. So we need -- that was a very good suggestion. So thank you for that.

In that same spirit, I heard about -- heard some suggestions relative to inter-sessional communications and a couple of different ways to do that. One of the things I want to get some input from you all on is in the area of workgroups. Because we did have some discussion today about workgroups and I think -- I think Alex actually gave us a charge in a couple of areas this morning in her remarks that we might want to think about some additional workgroups.

Some -- Liza's suggestion about onboarding. I

think that's something that we had done in the past about sort of overviews of the regulatory processes and the risk assessment processes that could be very helpful not just for people that have been on the PPDC before but for new members as well. Because that can help to, I think, inform not only what topics come to the table but by the context for topics that we bring forward.

And then obviously many others, but just a collection of topics and how we can better engage you all in the suggestion of topics. We feel that we need some specific input, balancing that with the needs that you all as members have because there might be areas for which you think you should be hearing and providing input. And we're not necessarily -- we haven't always given that opportunity. So we'll have to think about that a little bit more. But thank you for those as well.

I'm sure there are others. We've all been taking notes up here. But those were kind of the four or five major thematic areas that I heard. So thank you for that.

And I guess the last thing would be just some things relative to process, when a vacancy happens, how can that be filled. In the past, I wanted to

acknowledge something that Iris had said that in the past we had allowed substitutions kind of -- if a member could not get here on -- for a specific meeting. We actually recently heard from the people that oversee FACPA operations that we can't do that. So despite the fact that we had been allowing it, that was not a proper procedure. You all are appointed by the administrator, and so to allow a substitution is inconsistent with the administrator appointing each of you.

So -- but we can -- what we can do is we can talk to the people that administer the Federal Advisory Committee Program for the Agency to say -- to find out if there is an alternative way to handle that. So good point. It -- there has been a deviation from past practice. And I don't think we ever explained why. So I thank Iris for asking the question. But that being said, sometimes when somebody can't participate and they can't have a substitute, that can lead to a balance consideration. And so I think we have to think about that as well.

So -- so specific workgroups. We talked yesterday about continuing the public health workgroup but with a different charge. And so being -- the plan -- the recommendation there was we would have the

workgroup think about some additional topic areas that would be helpful, and then that would be something that would come back at the next PPDC meeting in the fall so that we could then select a topic or topics with a very specific charge.

Did you want to add anything to that?

UNIDENTIFIED FEMALE: And so just following up on what some of you suggested yesterday, maybe what we can do is have Shannon send out an email just to make sure we capture it because I think Rick said, too, that if we could get a little more clarity about what folks were thinking, you know, more specifics, I think that would help us with that list of topics as well, and if you have any others to suggest.

MR. KEIGWIN: Thanks. And then the second area that we talked about was a -- and it was mentioned here again this morning, was workgroup relative to the set-asides. And I think it came up specifically in the context of evaluating the effectiveness of the set-asides as it relates to worker safety programs. But there are a number of set-asides in PRIA that I would -- we have specific requirements relative to the worker safety piece. So that's -- that's an important thing to get going soon. But there certainly might be other areas as well that we would task a workgroup or

that workgroup to engage in.

One area that I heard Alex talk about, and it's something that she's talked a lot to us since she's come on board in January, is about risk communication. And so I wanted to get input from you all about -- and I would need -- we'd need some help in framing what that workgroup might look like. But is that an area. I think in the 24 years of the PPDC, we haven't had a lot of discussion at this table about risk communication, and would that be a valuable workgroup to try to stand up.

Mina looks hesitant.

MS. WILSON: I mean, I think if I say "biological products" one more time, everybody is going to leave the table. But, you know, our industry is kind of a unique industry and the kind of data that's behind it or not behind it is confusing to people. But the risk assessment certainly is as rigorous, or we feel like it's rigorous, sometimes maybe far rigorous, and it's very difficult to explain to people the benefits of what biological products do and can't do and how EPA looks at that and how the industry looks at that. And so I think that would be a good topic to talk about risk communication. So, I mean, whether we frame it in something else or not, you probably can tell that I'm

anxious to make sure that people understand what they are and what they can't do, what -- and all the benefits that they can give to a program.

MR. KEIGWIN: Dan and then Liza.

MR. KUNKEL: Yeah. I think it's a good idea, Rick. We've heard about some of the onboarding training and for some people who don't have expertise in certain areas. So I think risk communication would be a very valuable thing to add to one of the working groups.

MR. KEIGWIN: Okay. Liza?

MS. TROSSBACH: I'll just add, you might think that basically we all do risk communication every day in our jobs no matter what our -- what organization, you know, we're representing. I don't know exactly how a worker would be framed, what the charge would be, but I certainly think that that's something that we all face, you know, every day and would certainly be worth looking at or trying to scope out what -- you know, what a product would be; you know, what would be the purpose, but is certainly important to all of us from our respected areas.

MR. KEIGWIN: Are there -- what other workgroups areas, to kind of continue the conversations intersessionally? I don't want to -- I realize

everyone has lots of other things going on and so we can't have an infinite number of workgroups. But are there other priority areas that you all -- not only from your time on PPDC but from your engagement on these issues feel that there would be value in having deeper intersessional discussions so that we have things framed up in a deeper way for when we are together? And if nothing is coming to mind today, that's fine. Amy?

AMY: Nobody throw anything at me. I do think that it's very important for the end user since the label is the law -- and we've said that several times -- to really have somebody look at. And I think we have to involve industry because it would be a big thing. But to really have the sections on the labels to be consistent for all products. Because when I worked directly with the growers that are going to apply this, there's a lot of confusion, where do you find it, where can -- they call me standing on their spray wagon and they say where do I find this in the label; I'm looking and I can't find it. And I would at least be able to say section two is this, section four is this.

And so I don't know if that's a workgroup type of an issue, but I do think it's something that the Weed Plant Society would like addressed. And I think

it's something that I personally would like to be able to be more effective with the people that ask us questions around the label. Since the label is the law, I think it should be consistent and understandable for everybody.

MR. KEIGWIN: Thanks, Amy. Let's go to the phone and then I have another question for you all. So anyone else on the phone?

MR. GRAGG: Yeah. I would just say that on any workgroups that if there's a way to integrate more than one topic, obviously they would be relative to each other. I think that would be helpful for -- in a lot of different ways, especially in terms of getting everybody in the workgroup up to date about a lot of things that we're involved in or EPA is involved in. So I'd like to see more of a cross-pollination in terms of topics and activities that workgroups are engaged in.

MR. KEIGWIN: Thanks, Richard. So one question I have, so just even looking at this meeting's agenda, the vast majority of the topics were agricultural focused. So I'm kind of looking at our non-ag members, Jim and Steve. Are there topic areas -- and I think Kamal wasn't able to join us for this meeting, but even in the antimicrobial space, you know,

are there topic areas that -- from the non-ag side of things you all think would be beneficial for this group to be discussing, or things that are cross-cutting between the ag and the non-ag spaces?

JIM: So, I mean, thanks for bringing that up, Rick. Because when it comes to -- you know, in terms of structural pest control, we -- I feel like we kind of cross the line -- or not cross the line, but we span many of the different things. So in terms of, like, worker protection, worker protection is really important for structural pest control. We know we have a -- you know, 250,000 applicators who are out there working on a daily basis making applications in homes and businesses across the country.

So that's important. When it comes to, you know, ideas like label clarity. It's really important for us because we have folks that, you know, have a wide range of educational background. And so simple, easy to read labels are important.

Now, I understand that there's 100-page labels in agriculture. But those 20-page labels in structural are difficult. Right? So whether it's 20 pages or it's 100 pages, it's still tough to kind of wade through that. So that's important to us. So I think they're also important topics, right along with -- I

mean, and I can see also when it comes to risk communication, when I think of risk communication, something that Alex mentioned earlier kind of resonated and everyone touched on it, but might as well do it again. The idea of credibility. And our businesses that we represent, the users that we represent, the clients that they serve, all rely on the credibility of EPA. And so we feel -- and I think that it's important for EPA to communicate -- to better communicate the risk and the benefit, as well, of pesticides.

Because when it comes to communicating with clients across the country, our members recognize that for most of the folks who consume structural pest control, the only pesticide applicator they know, the only pesticide expert they know, is the guy that's spraying the outside of their house for spiders. And so our message for our people is that, you know, we rely on EPA to ensure that the products that we use are safe to use when they're used according to label instructions.

And so that's important for -- that's important for us. And so discussions around those topics would be good in the future.

MR. KEIGWIN: Thanks. Steve and then Amy.

MR. BENNETT: I'll echo a lot of what Jim said as

well. You know, because, you know, we were on a lot of the same challenges. I think also with the consumer space, the label -- consistent and clear labeling instruction is pretty challenging.

I think another -- I'll broach another topic. I know it's cutting edge, is the ingredient communication piece probably, which we're obviously working a lot with as the retailers and state activity are moving into that place and that might be an appropriate conversation to have in here. Where more label information is trying to be placed on the labels and a lot of it's driven on non-FIFRA products but it's touching into that space and it may very well be encouraged to move into that space or forced to move into that space in the future. And how do you grapple with that in making sure that the consumers who use those products have the right messages and they're not overwhelmed with too much information and ignore the critical information. So I think that -- which falls right into that risk communication piece as well.

MR. KEIGWIN: Thanks, Steve. Amy and then Liza?

MS. ASMUS: Yeah. I just wanted to sort of make a pun for the workgroups. And I certainly understand sort of, like, the need for us to sort of keep up on

what's happening and, you know, the issues for us to dive into. But I really encourage us as we move forward to make these workgroups really succinct and sweet and short.

I think it would just help -- like, we don't have to go on for years and years in a workgroup. I think we address a single issue and then we report back and our job here is done.

I think, you know, perhaps we could get more participation because of time that way, but, you know, just as an example of the one yesterday. I mean, it's a really succinct issue on how to help you evaluate the effectiveness of a very small subset of the partnerships. And so that's not, like -- that should not take us a long time. And we could be, like, you know, couple meetings and report back to you and be done.

So I -- not all the topics are going to be that simple or like that. I understand. And I think if there's more topics then that we need to explore and have more workgroups that would go into it. But just keep it fast-paced, keep it, you know, very, very succinct, very direct, so that we can help out with our expertise and move on.

MR. KEIGWIN: Thanks, Amy. And to that point

from a Federal Advisory Committee standpoint, that's actually what the purpose of a workgroup is, is to be narrow, quick, targeted and be done. If it's something that's going to be -- it's going to be saned over an extended period of time, the advice that we have received is that what we really need to do on that topic is form a subcommittee that requires us to go through the same type of outreach and solicitation and empaneling process as we would for the full PPDC.

And so I think our goal has been over the last couple of years in that given that process to design very specific charges to workgroups so that we can meet the spirit of FACPA but also tackling these topics. So thank you for that feedback there. And that's why it's also important that when we do form these workgroups that we come up with a charge of a group that we can then give to a workgroup that's very focused.

I think the pollinator metrics one is one that comes to mind to me that it took some time to get it going, but because it had a very focused charge it could -- it knew what its scope was, it knew what the intended deliverable was, and it could come forward with a -- progress reports, but then "here's what we've delivered; here's our advice; we think we're done."

Liza?

MS. TROSSBACH: So followup on Amy's suggestion and then what Jim had indicated about the, you know, label language. That's something that's very important to pesticide regulatory officials, of course. I mean, that's the basis of all programs. Both AAPCO and SFIREG have many different activities in that area trying to make sure they're clear and concise.

I think one thing that would be of value if this group decided to have a workgroup or look at that issue would be to have all of these various perspectives brought out that could be incorporated or considered as part of AAPCO and SFIREG's activities. So somewhat self-serving for me. But one of the greatest benefits of me participating on PPDC is to learn all the different perspectives that are out there. I mean, I can speak for regulatory officials, maybe a little bit of industry both on the aganomic side because of my professional relationships.

But to hear all the many, you know, different perspectives, and I think particularly with labels, it would be great to hear directly from the various groups, you know, what is important to the individuals, that organization that you represent. You know, what may be clear and concise to me is different than what's

clear and concise to somebody else. So I would certainly, you know, support that particular effort however that would be framed but to get some more feedback about what the needs are. So if we make a recommendation to EPA or say this is what we really think, that we're taking that into account. And I think that that would be, you know, really important.

And then just to add to Jim's comment about, you know, the credibility of EPA, you know, I know -- you know, my job-based associations are based on EPA. I -- you know, I believe in the process. I think there's always room for process improvement. But I think that's a very important issue, you know. And so if there is something to do to kind of forward that or enhance the credibility of EPA or provide constructive suggestions for how to do that, whether it's more communication, transparency, et cetera, I think that that would be of value. We represent a very broad group and I think it's up to us at this table to -- we all have an interest and we know it's important and, you know, and to project that as well. And so I would support any activities there as well.

MR. KEIGWIN: Sharon?

MS. SELVAGGIO: When we talk about labels, I support everything that's been said about labels. And

I also kind of think about pesticides related to, like, pharmaceutical industry. Because when you think about all the drugs that are available out there, really most of them are only available by prescription only; the vast majority. We as consumers can buy some things over the counter, but it's really only a few things that we can buy.

But with pesticides it's really the opposite. Most pesticides are not restricted use. And so I would like to see -- because I think education is one of the primary risk mitigation measures or risk reduction measures that we have. But we -- we really cannot guarantee for all the general-use pesticides that education happens at all. There's no -- you know, the label is the law. But, you know, how many people even read the label?

So I -- I guess I would like to understand better and have EPA look at the criteria for restricted-use pesticides, because the one thing that we know about restricted use pesticides is that you have to be licensed then to use them. And when you -- to be licensed, you have to go through an educational process that is somewhat rigorous. And that rigor and education is a risk-mitigation measure.

And so if we have a workgroup that addresses

labeling, I'd like to see that be part of the charge, just really what are the criteria and do they need to be strengthened, and, if so, how.

MR. KEIGWIN: Steve, did you have another? I just saw your tent card up. So one last check on the phones. So -- and then we'll come to Aaron. So, Andrew, Iris or Richard, any last comments?

MR. THOSTENSON: This is Andrew; I'm going to pass.

MR. GRAGG: Richard is going to pass as well.

MS. FIGUEROA: Same for me.

MR. KEIGWIN: Thanks to the three of you. Aaron?

MR. HOBBS: I'll add my thanks for teaching this feedback. I am curious, there's been a lot of feedback and I'm curious to see how you will process all of it. I hope that -- confident having worked with the Agency for a while that you'll take it under consideration and move forward accordingly, because there's been a lot of it. So I think that's great that you're willing to take that on. And in my experience, you've always taken that feedback seriously and under the proper advisement.

I guess I just want to say there's always room for any organization to -- and it's important for

organizations to listen to stakeholders and understand how they're perceived. And there's a clear -- I would say there's been a lot of feedback around improving how the Agency communicates. I think it's important to take that under advisement and look for those opportunities.

I just would like to state for the record that this Agency and this department is still the gold standard worldwide for the registration of pesticides. And I just would hate to leave the room on too negative of a note about -- or too much of here's where you can improve without proper recognition for. The United States and this EPA is still the gold standard for registration and regulation of these products globally. So, thank you.

MR. KEIGWIN: Thanks, Aaron. So we -- I'm going to shift to the public comment session. I think we have pretty close to a hard stop at noon and then I know some folks have flights soon early in the afternoon. So we have three public commenters. So I would first ask Keith Jones from BPIA.

MR. JONES: So I'm Keith Jones. I'm with the Biological Products Industry Alliance, BPIA. And I just wanted to add some brief comments on the biostimulant guidance. First of all, I wanted to thank

the Agency very much on behalf of BPIA and the biostimulant industry. We've been asking for guidance for quite a while, actually, and I know a lot of work went into preparing the draft guidance. So we really appreciate your efforts to get it out.

We did file a request to extend the comment period, and it sounded like with Bob and Russ the same, that there was going to be some extension just so that we can have more time to submit better comments. And that's really what's that's all about.

As you did hear, there are a couple of issues that the intention of the guidance is to give clarification. We feel in its current state there are some things that I would definitely clarify, but there are some things that we think potentially are more confusing. Table 4 is an example of that. So we will certainly be submitting detailed comments in our effort to help improve the guidance; to, you know, make it, in fact, clarify.

And then also something else that was mentioned, there is this work going on at USDA as a result of the Farm Bill that EPA is participating in. We would really encourage the two groups to coordinate their efforts as you have been because, again, if you were to look at biostimulants, if you were both to kind

of take a siloed approach to biostimulants, it could lead to more confusion rather than clarification. But we do believe, you know, if you continue to coordinate your efforts with the guidance and this report that's going to come out of USDA, we will get the clarification for the industry that we're looking for.

So, again, I just wanted to thank you for your efforts for putting out the guidance, and we look forward to the opportunity to submit written comments. Thank you.

MR. KEIGWIN: Thanks, Keith. The next person we have is David Beaudreau from the Biostimulant Coalition.

MR. BEAUDREAU: Thanks, Rick. My comments actually won't be that much different from Keith's. But I thank the Agency for working on this document. I've been involved in biostimulants now for about eight years in terms of seeking regulatory clarity. So I think it's a good step that we have a guidance document now to look at.

Similarly, we have some concerns with table 4, specifically listing of seaweed extracts and humic and fulvic substances. You know, if you look at market analyses of the industry, about 60 percent of the biostimulant market could be captured by those two

subcategories of the umbrella term. So I think that has a potential to create a lot of regulatory uncertainty at the state level. And so we hope that the Agency will look at our comments on that part of the guidance.

And then in terms of the USDA effort, we would strongly encourage USDA and EPA to coordinate with the Farm Bill authorized language. The report to Congress is an important step for the regulation of this product category. So I think as long as we know that EPA and USDA are coordinating, it will help avoid regulatory uncertainty.

So we look forward to submitting some public comments, and thanks for your time.

MR. KEIGWIN: Thank you. And then the last public commenter that signed up was Ray McAllister with Crop Life America.

MR. MCALLISTER: I just wanted to follow up on a point raised yesterday by Charlotte Sampson in the context of crop protection for hemp production. The recent Farm Bill outlines a system of regulation for production of hemp and regulation of those who produce hemp with details to be filled in by regulation by AMS. I think I understood Ed Messina to say yesterday that EPA's regulation on crop protection for hemp production

would be conducted strictly in that context of the hemp production as outlined by the Farm Bill.

The question I would like to raise is as the crop protection industry seeks to register products for use in hemp, they have to do that on hemp that is legally produced. And I'm curious about the role that EPA will take or assume in assuring that the data and studies provided to support a crop protection use are conducted on the hemp that is legally produced. Will there be some means or some requirement to demonstrate or document that, yes, the growers of the hemp on which we get our studies were legally authorized and registered to produce that hemp.

It's not a question to be answered right now. It's just something to take into account as you develop your regulatory programs.

And just one other separate subject I wanted to suggest is that in the context of workgroups that operate under the PPDC, you might investigate how Codex conducts its electronic working groups, which aren't intended to meet in person but handle a lot of the topics that Codex considers in their various committees. Thank you.

MR. KEIGWIN: All right. Thanks, Ray. So just a quick wrap-up. So with this meeting, there will

not be another meeting at the PPDC as part of the current terms that you all have. So everybody's terms expire. I think it's this summer. There are five of us who are at the end of their third term.

And so under Federal Advisory Committee Act requirements, you can't serve for a maximum -- for any more than a maximum of six consecutive years without some break of some kind. So I wanted to particularly thank the five people who have reached the end of their service to this committee as official members. And those people are Pat Bishop, Eric Gjevre, Richard Gragg, Donnie Taylor and Andy Whittington. So thanks to the five of you for your contributions over the past six years in particular.

We do not yet have dates for the fall meeting of the PPDC. The one thing that we are striving to avoid, because it has been an unfortunate tradition over the last couple of years, is so the fall meeting will not be over Halloween. So unless you all want to dress up or something, that could be fun. But we will -- we will avoid late October, early November, knowing that that -- going any later than that, we start to run into other situations.

So -- but we will keep everyone abreast of that. Just a few thank-yous. Thank-yous to the

presenters. We had a lot of presenters, many of whom were not on the committee who I think contributed really effectively to helping educate all of us. So I want -- I won't name all of them, to Josana Taylor (phonetic) and everyone who has supported her in getting the room set up and arranged. And, yes, we had -- we always have some issue with the teleconferencing. So, once again, we will revisit how we do that and is there a more effective way to do that.

Thank you to Paula Thomas and the staff of the EPA travel center who for several of you are involved in working with you all to help get you here. They put in yeoman duty while they're also making travel arrangements for us. But we're very fortunate -- we're one of the few offices that actually has a dedicated travel center. And so it really helps to have them. They do a phenomenal job. And I just want to thank them.

And then I also want to thank Shannon, who has been working tirelessly not only to do this but a host of other things. And I want to acknowledge several of the feedback that you all did have earlier today. I think some of the improvements that we have made are as a result of Shannon and her efforts to share

information more with you all and keep you all abreast of what is happening. So special thanks to Shannon for all of your work.

And then finally thanks to all of you. I know that this is -- it's not just the day-and-a-half that you're here, it's getting here, it's getting back home, it's carving out time from the myriad of other things that you're doing. And so it is very important to us that you are able to make that effort; that you're willing to make that effort. And so just our appreciation for the time that you are able to spend with us over a couple of days a couple times a year.

So, with that, I will close this meeting. Thank you all again. Thank you all for your feedback throughout the two days, particularly this morning. And we will be back in touch. Thank you all.

(The meeting was concluded.)