U.S. ENVIRONMENTAL PROTECTION AGENCY

PESTICIDE PROGRAM DIALOGUE COMMITTEE MEETING

Thursday, November 16, 2023

9:30 a.m.

DAY 2

PESTICIDE PROGRAM DIALOGUE COMMITTEE ROSTER

NOVEMBER 2023

NAME	AFFILIATION
User/Grower Groups/ Farmer Representatives	
Amy Asmus	Weed Science Society of America
Jim Fredericks	National Pest Management Association
Mark Johnson	Golf Course Superintendents Association of America
Patrick Johnson	National Cotton Council
Dominic LaJoie	National Potato Council
Lauren Lurkins	Illinois Farm Bureau
Tim Lust	National Sorghum Producers
Bob Mann	National Association of Landscape Professionals
Gary Prescher	National Corn Growers Association
Caleb Ragland	National Soybean Association
Damon Reabe	National Agricultural Aviation Association
John Wise	IR-4 Project

NAME	AFFILIATION
Environmental/ Public Interest/ Animal Welfare Groups	
Nathan Donley	Center for Biological Diversity
Jessica Ponder	Physicians Committee for Responsible Medicine
David Shaw	Mississippi State University
Alexis Temkin	Environmental Working Group Alternatives to Pesticides
Farmworker Representatives	
Becca Berkey	Community-Engaged Teaching and Research Program Northeastern University
Lauren Dana	Legal Aid Chicago
Mayra Reiter	Farmworker Justice
Mily Treviño-Sauceda	Alianza Nacional de Campesinas, Inc.
Public Health Representatives	
Joseph Grzywacz	Department of Family and Child Sciences Florida State University
Aaron Lloyd	Lee County Mosquito Control District

NAME	AFFILIATION
Marc Lame	Indiana University's O'Neill School of Public and Environmental Affairs
Chemical and Biopesticides Industry/Trade Associations	
Manojit Basu	CropLife America
Steven Bennett	Household and Commercial Products Association
Lisa Dreilinger	Reckitt Benckiser
Keith Jones	Biological Products Industry Alliance
Karen Reardon	RISE, Responsible Industry for a Sound Environment
Charlotte Sanson	ADAMA
Anastasia Swearingen	American Chemistry Council
State/Local/Tribal Government	
Jasmine Brown	Tribal Pesticide Program Council
Dawn Gouge	Arizona Experiment Station University of Arizona

NAME	AFFILIATION
Megan Patterson	Maine Department of Agriculture, Conservation and Forestry
Dave Tamayo	County of Sacramento Department of Water Resources
Wendy Sue Wheeler	Pesticide Resources and Education Program, Washington State University
Federal Agencies	
Walter Alarcon	National Institute for Occupational Safety and Health Centers for Disease Control and Prevention
Cameron Douglass	Office of Pest Management Policy, US Department of Agriculture
Charlotte Liang	Division of Plant Products and Beverages, US Food and Drug Administration
Ed Messina (Chair)	Office of Pesticide Programs Environmental Protection Agency

NAME	AFFILIATION
Cathy Tortorici	Endangered Species Act Interagency Cooperation Division National Oceanic and Atmospheric Agency

P R O C E E D I N G S

DAY TWO - NOVEMBER 16, 2023

ED MESSINA: Welcome, everyone. Hello? Okay. So we are going to do the Spanish translation now. Are we geared up to do that? Do we have to repeat everything?

Okay. Nobody heard? All right. So virtually we are now connected. We're going to give you instructions on how to access the language channel for Zoom.

[Spanish instructions]

HOUSEKEEPING

JEFFREY CHANG: CART services are also available virtually and that can be accessed through the interpretation button to select Spanish translation.

The following instructions are for those who are attending the meeting in person. Translation services can be requested in the back of the room. Headsets are available for those who need them. There is an ASL interpreter in front of this room and screen. Headsets are available for people who are hard of hearing. Please see Michelle.

If you are a member of the public, unless you indicated interest in providing oral comments

when you registered for today's public meeting, you will be in listening mode for the duration of the event. If you did not preregister for comment, you may still email Michelle or use the raise hand function once we come to the public comment period at the end of the day.

Virtual PPDC and workgroup co-chairs are designated as panelists in Zoom, meaning that they can request to be recognized during the discussion sessions by using the raise hand function and can unmute themselves after being called upon. It is very important that you remain muted unless you are recognized to speak. And for people in the room, we will start with you guys in the room first and then go virtually.

Today's meeting is being recorded for the purpose of having meeting transcripts produced. We ask that all presenters speak slowly and clearly to ensure everyone can understand and participate fully in the meeting.

Conversations should take place orally. The chat function should only be used to contact the meeting host.

Some conference room information, restrooms are in the back of the conference center.

There's a water-filling station in the pantry. Please do not leave the conference center without an EPA escort. We have refreshments in the Boston Room, and if you need to take a call, please go to the Great Lakes Room.

Let's take a minute to walk through today's agenda. Our morning sessions kick off with an update from the Emerging Pathogens Implementation Committee, then the Pesticide Resistance Management Workgroup. We will take a short break, then continue on with an update on bilingual labeling and other environmental justice issues. We will break from lunch from 12:00 to 1:30, then reconvene with an open discussion and topics moving forward. We have a period for public comments, and then the meeting adjourns.

With that, Ed, would you like to share anything with the group before we launch into our first session?

ED MESSINA: Thanks for a great session yesterday. We've got a lot of great folks talking on the agenda today. Thanks for the respectful conversation yesterday and let's keep it going, keep the exchange going. I thought it was really great. I think it is a testament to being in person as

well. So don't be shy about turning that tent card up and thanks for many of you who have done that already. So thanks.

With that, we can get started.

JEFFREY CHANG: We are going to kick things off with an update from the Emerging Pathogen Implementation Committee for which I am joined by Tajah Blackburn, Senior Scientist, Antimicrobials Division in OPP; Anastasia Swearingen, Senior Director of the American Chemistry Council; and Rhonda Jones, CEO of Scientific and Regulatory Consultants, Incorporated. Welcome all.

EMERGING PATHOGEN IMPLEMENTATION COMMITTEE UPDATE

TAJAH BLACKBURN: Good morning, my name is Tajah Blackburn. I'm a Senior Scientist in the Antimicrobials Division Efficacy Branch. Additionally, I serve as one of the chairs for the Emerging Pathogen and Implementation Committee, EPIC, because we truly are epic in what we do.

Along with Rhonda Jones seated to my right and Anastasia Swearingen, we will provide an update of the EPIC workplan accomplishments over the last six months.

All right. So what we do for each of these updates is I just provide a brief context as

to what the group has accomplished and how we got to this point, and the impetus and origination of the group and the membership of the particular group, and then, lastly or next to last, we will provide updates for the respective groups and then, finally, end with a question to the PPDC.

It's always a pleasure to provide these updates and I'm always excited about the work that is accomplished over the operational year.

So the initial workgroup was conceptualized and proposed to PPDC in the fall of 2020 by the Centers for Biocide Chemistry. The original proposal envisioned a group charged with conducting a retrospective analysis of EPA's antimicrobial response to the COVID-19 pandemic.

From concept to reality, the formation of the official initial group, the Emerging Pathogen Workgroup occurred in December 2020 with the first meeting occurring in early 2021. The initial group consisted of 20 persons from regulated industry, academia, trade associations, regulatory and technical consultants, the transportation industry, and from the Centers for Disease Control and Prevention, CDC.

These 20 members worked diligently to

address four charge questions through biweekly meetings over a two-year span. At the workgroup sunset, greater than 85 recommendations were given to EPA AD to consider and prioritize, and if adequately developed, implement.

Within the Antimicrobials Division, we did just that. We prioritized all 85 recommendations and the results of that exercise were presented in the Spring 2022 meeting. During the same meeting, PPDC voted to, number one, for a new workgroup to refine and develop and provide a pathway for implementation and, secondly, expand the workgroup to consider additional antimicrobial pathogens.

So with this vote from PPDC and the ask to expand the antimicrobial landscape, EPIC was formed in July 2022 for a two-year commitment. The implementation group in its first operational year has focused on the EVP guidance through the technical workgroup, identifying communication and education gaps from sectors that use the antimicrobial products through the communication and education workgroup, and then with the policy workgroup really focus on policies centric to EVP and consider other policies for label claims.

Small workgroups have been formed to

really develop the prioritized recommendations around the EVP, the communication and educational gaps, and the policy enhancement formation. These small workgroups are always book-ended by larger EPIC meetings to share the happenings so that the information is shared throughout the larger body.

This slide identifies the EPIC membership and it signifies the continued diversity in membership across industry, federal agencies, trade associations, and consultants. It is important to note that some of the current members are held over from the previous group, holdovers from the Emerging Pathogen Workgroup. They actually stayed on, because I guess they had such a good time the first time, for the EPIC group as well.

Significant milestones were accomplished this year by the technical small workgroup in May. The technical workgroup provide revisions to the Emerging Viral Pathogens Guidance to EPA for consideration. In the next couple of weeks, we will be briefing our Antimicrobial management regarding those changes and modifications to the Emerging Viral Pathogens Guidance going forward and options for those implementations.

So now let’s delve into the small

workgroup updates. In addition to chairing the larger group, I chair the small workgroup as it relates to communication and education. This workgroup's membership is provided on the slide with their respective affiliations, et cetera. So very diverse, from a lot of different walks, and we have done some work for this the last six months.

To provide some context, the original charge question addressed by the initial Emerging Pathogen Workgroup was to provide a deep dive into the education or the educational needs during a pandemic or other emergencies for the public, end users, and other regulating authorities. The retrospective -- the issue of conducting the retrospective analysis was that there was ineffective messaging across several sectors due to information and educational gaps. So our response was to develop targeted information to address those gaps through having discussions, surveys, et cetera, in order to identify what those particular gaps consisted of.

So to better understand those gaps, initially what we wanted to do, we were really ambitious, we wanted to go out and conduct surveys. So all the sectors or most of the sectors that use

antimicrobial pesticides, we decided we were going to send out this ten-question survey and really get a lot of information about the strengths and weaknesses around EPA's antimicrobial response during the COVID-19 pandemic. We realized early on that that was pretty ambitious, and so if we wanted to get something accomplished within a reasonable timeframe, we had to really be creative in how we approached this.

So we started to look at the literature because guess what, a lot of surveys were conducted during this period of time. So we looked at the literature, we had conversations. We had a lot of conversations with hotel chains, our other sister agencies, to just really understand what we did well and what we didn't do well and how we could do things better going forward.

We had emails. Emails came in regarding the proper use of disinfectants during the season and the challenges that were encountered from prolonged use and the frequency of use and all these different things, and then other resources. And those other resources consisted of maybe outreach, informal communication back to the group, et cetera. So we had a very, I guess, diverse sampling of

information as it related to the sectors that use the antimicrobial products, so not just survey-centric.

So this is just a clear snapshot of the different sectors that we gathered information from. So as you can see, very, very diverse, a lot of information gathered, a lot of not necessarily surprising information gathered, but a lot of recurring themes; a lot of information that regardless of sector, individuals expressed that this was a concern through the use of antimicrobial pesticides during the pandemic.

So these were just -- this is just the crux of the conversation. There were four major themes that were identified, regardless of sector. Some of these overlap more consistently with the sectors, but a lot of these were just the recurring themes that I was just really, really surprised about. I thought we would really get into, you know, more of the nitty-gritty. But these were a lot of overarching, high-level concerns as it related to the use of antimicrobial pesticides during the COVID-19 pandemic.

The first one was exposure issues, overuse, frequency of use. Is there a way that a

worker protection standard could be developed for antimicrobial pesticides? So just a lot of concerns about overuse, overexposure of antimicrobial pesticides during the season.

The next one is one that we see even outside of the pandemic, this confusion and misinterpretation of the use of disinfectant, the terms “disinfectants” and “sanitizers.” What do they mean? How can we better describe those for the individuals that are using the products?

Language barriers, another thing that was highlighted, literacy challenges. So when you’re looking at an EPA registered label, what does all this stuff mean and how do you translate that into proper use? So that was a concern as well that was brought to our attention.

And then, lastly, incompatibility. We hear this even outside of the pandemic about incompatibility of the antimicrobial pesticides on different surfaces. And I remember one particular conversation where this particular sector was saying, well, we just bought a suite of products and we just use them on everything. So at the end of the pandemic or midway through the pandemic, we had to replace a lot of things that were damaged from

overuse of these products or the incompatibility of the products on particular surfaces.

So these were the four things that kind of resonated during those conversations. And in addition to having these conversations, we asked some of the individuals what tools or resources could EPA provide to better address these educational gaps. One that kept coming up is infographics, we need pictures, we need a better way to describe how to use these products.

So guess what? We are trying to tackle that now and that is way outside of my expertise, but we are trying to see what resources exist from our different -- from our membership, what resources are already available as it relates to the development of documents, resources to better communicate how these products should be used not only during emergency situations, but normal everyday use as well.

And I also want to highlight we have started the -- well, we've started the Spanish translations of the EVP guidance and some of the list. That should be completed in December. So that process was started early this year and we're excited about that as well.

So our next phase is to propose products, develop products, propose a location for these products, and ultimately address, if not all aspects of the communication, educational gaps, but at least some of those.

Now, I will transition to the Policy Workgroup update.

ANASTASIA SWEARINGEN: Thanks, Tajah. I see you all the way down there. Thanks so much.

So the Policy Workgroup had a lot of overlap with -- I remember, I have to hold this.

So we had a lot of overlap with the information that Tajah gained from those surveys and the work that Rhonda is doing in the Technical Workgroup. So we're a little bit of a bridge between the technical and the communications work and translating those into some policy recommendations.

So if you want to move to the next slide.

So a few things that came out of our learnings from the pandemic and the recommendations from the EVP Workgroup from the last PPDC. So one of the areas was -- of confusion was when you're at the store and you want to buy a product and you are there, how do I know if this is effective against an

emerging viral pathogen. And for those products that are using the EVP status and so don't have the test and the claim on the label, you know, we have the EVP policy, but there is no on-label information for folks about that.

So one of the things that we looked at is, well, how could we provide that information at point of sale without changing the label permanently because we know that that is kind of outside of the scope of policy. So one of the things that we looked at originally was could there be some icons. That was the prioritized based on the reality of the regulatory hurdles and what that would mean.

So another proposal that came up, especially with the idea of using QR codes and website labeling through the bilingual labeling, is could we have a proposal for the use of a QR code that could convey that information during a pandemic and the authorization of the EVP policy?

So that is still under exploration with the AD. We've kind of put that together what this might look like. So that's still under discussion.

Then looking at the issue of overuse and misuse of pesticides, especially during the pandemic. So we wanted to understand how is that

being reported and so we looked through and Tajah had some conversations with OECA about how those are being captured within the federal database and those who were reporting the incidents to OECA. And we noted that it was a little bit confusing for how you might report an incident of overuse in an antimicrobial space. So we are putting together kind of some suggestions for how they might maybe change a field or two.

And then on looking at the policy options to address some of the feedback that Tajah gathered from the user groups, so looking at the issue of surface compatibility. You know, how can we better convey to folks that the products have to be used in accordance with the label and just because you have a disinfectant, you can't use it on everything. You know, these are for hard, nonporous surfaces, or if they have the other surfaces. So one thing that we looked at was could we put some language on the EVP website for folks who are looking at those products that would comply with the emerging viral pathogen policy to remind them to use it in accordance with the label directions and explaining what that is.

And then, also, as Tajah noted, exploring different communication tools for our targeted use.

You know, not changing the label, but giving information to those who are most likely to use these microbial products.

One of the issues, you know, we found constantly with the idea of overuse and misuse is it's hard to know what is the appropriate amount to use, because as soon you disinfect a surface, you could again have an incident where somebody gets sick and you have to disinfect again. So you could, you know, be in a situation where you have to use the product multiple times in an hour but, you know, more frequently, what is the best practice there. So there are a lot of different policy issues that we are still exploring further.

I think I have another slide. I don't remember. Yes, future activities. Again, developing policy recommendations for additional resources during public health emergencies. We are working on that product compatibility with common surface materials.

Another issue that came up is when the pandemic -- you know, we had a lot of requests for new products and the idea of using the Section 18 pathway for getting new things on the market. What we found with EPA and dealing with what they had to

look at with these pathogens is folks were coming in with not a lot of data and it wasn't really clear that they were meeting the basic requirements for getting that Section 18 emergency use.

So how can we kind of provide some guidance to folks who might put in a Section 18 request for a public health pathogen to really make sure that they have some efficacy data that they can actually show that the product works and not just the active ingredient, but you can't take a product, you know, and put it in a new medium and expect it to have -- to bridge the same kind of efficacy data. There has to be more information that is put there in that package. So that is something that we are working with the Technical Group and that Rhonda has been kind in giving a lot of feedback on.

And then we haven't tackled this yet, but the interfacing of PR 98-10 on emergencies for faster submission processing. So that will be kind of something we look at after we tackle the Section 18 issue.

I think that's the end and I think it is Rhonda's turn now.

RHONDA JONES: Let me see how long this lag is. There we go. Let me get this a little

closer. Thank you. It is kind of warm.

So, yeah, welcome to the Technical Group update. First of all, I want to thank the PPDC so much for allowing me to be part of this. It's just been an amazing experience and I have learned so much. Not to geek out for a minute, but you cannot imagine how fun it is to be on a call every Thursday with this group of people and to listen to them talk about germs and their stringency and testing the different products and things that are going on in the military with this and things that are going on internationally. It's just truly an amazing experience to be a part of this.

I want to also thank our team that is there on the slide -- you may notice it's almost doubled in size. As we began to move through different microorganism types, it became very obvious that we needed additional expertise. So we have gone out through the group of the core team and their contacts and we have recruited people in all different sectors with the different knowledge bases to help us with each of the different microbe types.

So we have a really nice balance of academicians here, government staff, public health

staff. Most of the major contract labs that are doing this kind of testing and the data that is being submitted to EPA are represented. There are many registrant stakeholders here, too, that they have their own labs or just have the experience with testing the products as we go through this part of consensus building on each of the different types of microbe types.

So here's just a quick look at where we are at. I think about 30 or so of those 85 items that came out of the original workgroup landed in the Technical Workgroup and almost all had high priority rankings. So we have completed embedding all of those high priority items into the revision of the viral pathogen policy and, as Tajah mentioned, we consider that complete at this time.

We have turned over the redline draft to the agency. The agency has come back with a series of questions, which we have answered and provided explanations and references to, as well as talking to them about how implementation should go and making some recommendations on that.

So while there may be the occasional stray question that still comes up on the viral policy, I think we basically, as a committee, feel that is

complete. We have moved on now to discuss bacterials for farmers. I'm very hopeful that we will provide the final version of another draft. We're reporting out the deliverable we are using is to actually write a policy, similar to the emerging viral pathogen policy that is there. So that is actually in rough draft right now for the bacterials for farmers, inside the committee to take a first look at, but I'm hoping to deliver that to EPA at the end of December.

The next item you requested was the mycobacteria. So, of course, tuberculosis is one of the biggies in this category. We have finished our consensus building on that and the various hierarchy and prerequisites. We have come together on that and we are just beginning the drafting aspect of that document. Again, we plan to deliver it in the form of a written policy for the agency so it might be a little easier to implement.

We may deliver this earlier, but I'm thinking somewhere in the January time frame, we should have the one off to the Antimicrobial Division as well.

While we are writing, we are continuing on in consensus building, so we will move to fungi and

yeast next. We are just beginning those conversations; just started those last week. We actually have pulled in another expert last week to help us in that area as well.

So I'm anticipating around the March time frame of having that drafted. They seem to be going a little faster. I don't know if we're getting better or it's a little easier because we are building on the stringency hierarchy that is already there. And then we will do bacterial last.

So I'm hoping to finish all of the policy writing in the April time frame before our sort of May cutoff when our committee expires or whatever the right term is. And we will talk about that in a minute.

There were a number of medium to low priority items that also fell in our lap. One is to continue to look at the EVP landing page and it is just sort of an ongoing thing. As we are writing these things and answering some of the Antimicrobial Division questions, we just keep coming up with, oh, we should add that to the page or, you know, we should put everything on the page in bilingual language and things like that. So that is an ongoing activity.

As far as the 810s go and the revision to those guidelines that were asked for ESS and residual, I think the committee believes that that's probably not an action that we need to do any longer. The agency has actually already just recently updated the residual guide itself. So I think we're just waiting for confirmation if there is any other assistance the agency needs for us on that one, but that one may also sort of technically be complete.

Then we will look at doing the things Anastasia already updated with on the policy group. So every other Thursday, we meet on the emerging pathogen policies, and then in the middle week, about half of the team meets with Anastasia's team to work on the other aspects there. So that is how we are working the group.

Just to talk a little bit about the consensus building, when we get started with each microbe type, we are starting with literature search. In one case, the B lab had a viral literal search we could build on and then we did some adding. So my team at SRC has been doing the literature searching for us to feed into the group and, of course, the experts themselves come packing

their own experience, testing experience, and their own publications and that type of stuff.

So we do a gathering and we are keeping track of all of those references that we are using to build our consensus around and then we start working on building the policy and looking at the stringency of the organisms. We build a lot off of the Klein (phonetic) and Deforus (phonetic) and Spalding publications and there's been many publications of the hierarchy over the years. And that allowed us -- with the viral, we basically took the existing 2016 policy and redlined it. That is how we finished out on that.

And we kept -- in that particular case, we kept the science prerequisites the same as what they have been in 2016, but we added some additional ways to qualify to get to do that claiming based on having spore claims. So we did a little updating there, but the infrastructure of the science pretty much stayed the same.

When it came to the sporeformers, we are really creating something that didn't exist. So again, we started with the literature, started with the sharing of everybody's knowledge and their expertise, and the testing that they have done. A

lot of very interesting information came from USAMRIID and also the work that they had done with the UK in spores. And the military looks at spore decontamination a little different than we do in this particular area, but understanding how spores relate to each other and how emerging spores might be predicted by existing spores is all the kind of things that we are really talking about in those groups.

So we have concluded that consensus building and, obviously, we just told you we have written up the policy based on that. Along the way, we are also capturing a bunch of additional recommendations on our existing registration standards, whether we think the methodology is right or could be improved, whether the test carrier should be improved, whether the strains that this is based on should be improved as well. So at the end, there will be sort of a separate document that collects all of those general recommendations from these experts on the testing methodology as well.

At the end of the day, once we finish what we thought was scientifically correct as far as the prerequisites of the registration claims that you would already have on a label, at the end of the

day, there's not a lot of products that are currently registered to meet this potential need.

So we did provide the agency with a variety of what we called case-by-case recommendations. They were recommendations on how to feed the supply chain with other products that would already be registered, but we didn't feel like that should go in the policy itself for registrants to use under the policy, but rather just to help inform EPA if they should find themselves in that situation, that there are some maybe step-down organisms on labels that could be used in certain circumstances. So that is also coming along with each of these documents now, too.

Mycobacteria consensus building done here, again, we are sticking with the same kind of strategy of prerequisites. In this particular case, we are drawing on the spores, we are drawing on prions. We're going to also Candida auris and M. bovis itself, which is the registration strain that we test to support that hierarchy. And, again, we have a number of general recommendations on actually replacing the standard test strain, which is not really a novel concept here. It's been talked about quite a bit.

So we are capturing all those things and we are moving on now to fungi and yeast. We are kind of in a groove as to how we handle this. So it will be the same kind of things as we go.

While I have given you a pretty aggressive set of deadlines, I do think they are manageable. However, we might get kind of close on the bacterial one as to whether we really get things done by May when we are to disband. So we want to ask the question of the PPDC if we can have a six-month extension to complete our work. Again, the bulk of the work, we think, will be done by continuing to keep us for that six months. It also gives the agency a chance to take in what we are writing, review it, come up with a list of questions and come back to us with any concerns or questions or why did you come to this conclusion kind of thing.

So it will allow us to help finish up some of the projects we are doing with the policy workgroup, too, which alongside this work may challenge us to finish by May.

And I think that is our update. I have in the appendix -- when you get the deck available, I don’t want to go through in great detail, but I have provided you with the tables of this consensus

building work that we have been doing where we have gone organism by organism, strain by strain, and what our general recommendations were under each strain, under each test method of each strain that are in the guidelines. So you have a whole series of different tables here.

And they are also structured by surface type. So we have hard, nonporous surfaces; we have hard, porous surfaces; and we have soft surfaces. So we are giving you those. And then, also, the same for the mycobacteria. So you have that in your packet as well.

With that, I will turn it back over to you.

JEFFREY CHANG: Thank you. Let's now turn it over to the PPDC for discussion.

As a reminder, please turn your tent card and state your name and affiliation.

Lisa?

MS. DREILINGER: Hi, good morning. Lisa Dreilinger are from Arxada.

So I want to start by saying thank you to Rhonda and Tajah and Anastasia. There have been countless hours of work that certainly does not go unnoticed. It's adding so much value to the

preparedness of the agency to be able to respond properly, timely, in a way that allows the end consumer to be protected. So just a heartfelt thank you to start.

As a PPDC member and a member of the subgroup, I may be biased but I do support the six-month extension. I think the bacteria is something that consumers will find in their home and they find on a daily basis, and if we don't complete all of the work, I think we are selling the end user short from possibilities of benefitting from all the work that has already been done. So I just wanted to share that I support the six-month extension.

Specifically, for Tajah for the first little presentation, I don't know if you were online yesterday, but I know you weren't in the room. As part of the Label Reform Workgroup, we talked a lot about the end consumer and the end user and what might benefit them. And although that is currently in the Labor Reform Workgroup's parking lot, the hope is that it will come out of the parking lot at some point, and I'm wondering if we could partner and share some of the information that you have presented here.

I think it has also been noted from other

-- of other segments, some similarities, but I think it is important to pull from more than one place. I think the overarching comments will be the same, but I think we could really learn from some of the conversations that you have had and I'm wondering if there are additional data elements that -- like maybe the graphics that would be optional, but could be applied in the label as well. So I just think there might be some learnings that we could share.

Thank you.

JEFFREY CHANG: Dawn?

DAWN GOUGE: Thank you. Dawn Gouge, University of Arizona.

Well done. It's fantastic work. I love the idea of infographics in order to not only convey information about what -- how products should be used safely, but also how they should not. I, just briefly, would like to give you an example of humans being humans during the pandemic and at other times to. I'm involved in school IPM efforts in my state, and we had an alarming number of situations where concerned parents or teachers were observing elementary school age kids using the hypochlorite wipes at the beginning of class, at the end of class, and then even if they're staying in their

same seat and then high schoolers who were transitioning constantly, again, using hydrochloride -- primarily hypochlorite, not entirely, but primarily hypochlorite wipes.

Then, of course, the little kids, what do they do, they wipe their hands, they wipe their faces, they clean out their ears, whatever little kids do with inappropriate wipes.

So, you know, obviously, we get the information and so we reached out to EPA, who directed us to our state lead agency. Our state lead agency told me that there was nothing going on wrong that could possibly be corrected. So to clarify, there is no minimum age for use of wipes, which seems bizarre to me, frankly. The actual wording that says on these containers, keep out of reach of children, is not part of the label. It is a cautionary statement that it is entirely optional depending on what you want to do in the day. Seriously.

So there seems to be a few things that might actually be able to be tightened up a bit, perhaps. And, also, when addressing infographics, great opportunities to address the humans being humans part of how these products are actually going

to be used by real people.

Thank you.

RHONDA JONES: I don't know if you want us to respond to that, but I will say the school example was something that was really brought up and we actually looked at some infographics that CDC and HCPA had done with California to educate both schools and day cares on how to properly use the antimicrobials. We know that that is a prime area for misuse and overuse and I think it is an area where we really want to make sure that those are more frequently distributed amongst the school communities. And thinking through how we do that, I think is an important part of our Communication and Education Workgroup.

Tajah, I don't know if you want to make any other comment on that?

TAJAH BLACKBURN: I think all those points are very salient and really speak to the conversations I had. One particular group -- and I see, Joe, you're down there. How are you doing?

He was actually instrumental in connecting me with the migrant farmworkers. Those conversations were really heart-to-heart and they really emphasized the humans being humans type of

thing and just the gap in information.

So all this resonates with me and Anastasia. Thank you for highlighting those things. We are going to do our due diligence as far as proposing things? If, in your workshops, you know of different resources that could be along the lines of an infographic or pictogram or something that we can use to just really kind of hit home as to the proper use of these products in daily operation, not just during a pandemic as well.

So thank you for those points.

JEFFREY CHANG: Joe?

JOE GRZYWACZ: So I'm going to do my -- oh, I'm sorry, Joe Grzywacz, San Jose State University. I'm going to try to make three really clear points.

Point number one, oh, my gosh, you guys, you are totally a machine. After having a guy like me slow you down for a period of time, you are on momentum and on fire. So goodness, gracious, which leads me to point number two.

If there is an official motion on the table, I second it. This needs to be -- the work needs to continue. So I think the extra six months is warranted, but I think it is also an important

part of the procedural elements of the learning curve that these groups take. You know, I think we need to take that learning curve into consideration when we create these groups because, I mean, Polish guys like me, it takes us a while to catch up with where the conversation actually is.

And so just as a matter of process, I think it is really important to make sure that when we create these working groups, we build time into that for kind of the getting on the same page, acquiring the same language, just getting to know each other, so that that is actually part of the work plan, rather than expecting it's just going to happen overnight. So that's point number two.

Point three, which has already been made, but I really want to emphasize it, is that we have to remember that at the end of the day, language is symbolic. So while we can talk all we want about translation and all that other kind of stuff, some words don't have a translation. I was reading through the white paper, for example, just yesterday and there's all sorts of scientific speak in there, like metadata. People outside of this room and data scientists don't know what metadata are, so it does not have a translation into some language.

So I think it is really important that we, of course, use good scientific language and that sort of thing to make sure that we are grounded in the work that we are doing. But we also have to remember at some point, that needs to make its way to the elementary school age teacher who at best maybe has a Bachelors degree or to the farmworker who -- at least modal education for the national agricultural worker survey is sixth to ninth grade depending on where you are in the country, and then remembering that language is symbolic. There is not a one-to-one correspondence for that.

So I just really want to make sure that we keep those three ideas as your momentum continues to move forward. So thanks for the great work you guys are doing.

JEFFREY CHANG: Alexis?

ALEXIS TEMKIN: Yeah, thank you, Alexis Temkin, Environmental Working Group.

Again, really awesome work. Everybody's said that already. I wanted to highlight, I think, like one of the very unique aspects of the work and really important was how you went out to different groups, how you collected that information about use, misuse, real world use of antimicrobial

products. And I think that could be definitely expanded to other pesticides, right?

And the importance of what was in that information and data that was collected and how critical it was to understanding the next steps of that program in terms of coming up with where the confusion is, how are we going to address those with materials so that we are ensuring these products are used safely, and just to highlight -- other people have talked about it, right -- the misuse, the overuse was something that clearly kept coming up in terms of antimicrobials with the pandemic and we needed this -- it wasn't -- the pandemic was, obviously, something that accelerated and highlighted that, but it also was probably occurring beforehand.

So just the importance of keeping that in mind, especially in assessments of the safety of these products and risk assessments, things like that, you have to consider that. Worst case scenario, the children, you know, misusing these products, all those things.

So I also just wanted to add that within the agency, right, there is the safer choice program and the design for the environment program, which

looks at safer products, safer disinfectants. They have a whole list. You know, you can go on the website. If people haven't been there, you can look at products that meet their criteria, and I think there is five or six antimicrobials and then 20 or so disinfectants and you can select for SARS-COv-2.

So just thinking about future materials, communications, infographics, they have a logo, a label, how to just leverage some of those other materials, especially within the agency, too, to just note that not all products and not all antimicrobials or pesticides are created equal, too, in terms of when it comes to health and safety and who is using them.

JEFFREY CHANG: Mily?

MILY TREVINO-SAUCEDA: Good morning, Mily Trevino-Sauceda with Alianza Nacional de Campesinas. I wanted to echo what has been said and, at the same time, bring, again, the information up -- the issue about when -- because it is a different language or different languages that we are recommending, translation is not going to be enough. Interpretation is going to be more than important to make sure that -- I think I said it yesterday, but I'm going to repeat it every time.

Then make sure that if we are putting together information, we invite people who we're going to be targeting or different kinds of focus groups to make sure that people will be understanding what we are putting together. Because if not, you know, we are just going to be thinking that maybe this group did a great job when, at the end, it is a different scenario out there with the community.

Thank you.

ED MESSINA: Any other discussion needed before we go to vote?

(No response.)

ED MESSINA: Okay. Would somebody like to put a motion on the floor to extend this workgroup by six months?

Joe is putting that motion on the floor. Would somebody like to second?

MS. DREILINGER: I'll second it.

ED MESSINA: Who is --

MS. DREILINGER: Me.

ED MESSINA: Oh, okay. Lisa seconds. All right. We'll take a vote.

All in favor, say aye.

GROUP: Aye.

ED MESSINA: All against, say nay.

(No response.)

ED MESSINA: The ayes have it and the motion passes.

Thank you for a great presentation and a great session.

Just to address a couple of points, we would not have been as prepared as we were for responding to the COVID pandemic but for this group, and it wasn't only the -- and the groups that preceded it. It wasn't just the establishment of the emerging viral pathogen policy that allowed us to do that, but it was those connections -- Joe, right -- that we had established in advance to when the agency was presented with this issue.

If you look at the record on COVID-19, EPA was one of the first agencies in January, early January of that year, to launch the emerging viral pathogens policy. Industry had provided us a list of things they thought would be effective against SARS-COv-2 based on the hierarchy of kill. We put up our little PDF first and then we had a little HTML site and then we finally went to a web app on your phone. And all of the iterations about making sure the directions were clear, how to find that

product, it was just -- that was that year of 100, almost 99 OPP updates, and a lot of -- I credit the work of this group and all their predecessors for really helping us be prepared.

As we have already seen, knock on wood, we hopefully don't have a future pandemic, but another emerging viral pathogen will occur and we activated that twice last year for hemorrhagic fever and Ebola. So this work needs to continue and thank you again for your work and for the great discussion.

JEFFREY CHANG: Thank you. We will move to the next set of speakers and we will give a few seconds for people to switch out.

(Pause)

JEFFREY CHANG: Let's now pivot for an update from our Pesticide Resistance Management Workgroup. For that, we are joined by Nikhil Mallampalli, Biological and Economic Analysis Division in OPP, and, virtually, Cameron Douglass, USDA Office of Pest Management Policy. Welcome, you two.

PESTICIDE RESISTANCE MANAGEMENT #2 WORKGROUP UPDATE

NIKHIL MALLAMPALLI: Thank you. I am going to go over the first few slides which are basically just a recap of the context within which

this workgroup is going to be operating and remind you of its charge questions, and then Cameron is going to cover the rest of the update.

Okay. So this slide just summarizes what EPA has already been doing in the area of improving the implementation of resistance management principles by the end user, particularly in agriculture. But this is something that spans all pesticide use potentially.

About six or seven years ago, we decided to pay more attention to ways in which we could get the word out that EPA is interested in implementing -- helping people implement resistance management. To that effect -- to that end, we issued two pesticide registration notices that were aimed at helping registrants to improve the kind of information they're putting on their labels to help the end user do that resistance management. So these were updates and expansions of an existing PR notice and they were developed in collaboration with the Resistance Action Committee and other academic experts and industry experts.

Basically, this was an attempt to make sure all labels have a mode of action labeling and some basic resistance management-related, integrated

past management information, things like scouting before treatments, scouting afterwards to see if there was any unexpected survival and that sort of thing.

We have been steadily implementing the use of these pesticide registration notices in registration and registration review. Since 2017, about 200 registration review chemicals have adopted that language. So in other words, our Pesticide Reevaluation Division has been working routinely with registrants who have been generally very cooperative in putting this kind of basic information on labels. So that's about 200 of about 230 and more are coming up.

I'll also mention that EPA evaluation of the benefits of a new or existing active ingredient includes the value of what it brings in terms of resistance management. So that is considered part of its benefits, which our risk managers then balance against any risks that need to be mitigated. That's part of the typical FIFRA-mandated risk assessment that is -- incorporates benefits.

So that is what EPA has been doing recently. And while that has been seen as a positive thing and generally well received, there's

also been a consensus that more could be done by EPA, as well as many other interested stakeholders, registrants are an obvious one, but there's pesticide retailers, there's the people farmers talk to. Everyone could do a better job of conveying to mainly farmers, but other pesticide users, why the resistance management is important and how they could do it in a scientifically principled way.

So to help EPA think about that, PPDC implemented the first Resistance Management Workgroup, what I'm calling Workgroup 1.0, and they started in 2020 and ended at the end of 2021, and they issued five broad recommendations that they said -- they urged EPA to consider seriously.

I'm summarizing them on this slide and the next one. The first one of those recommendations was that EPA should explore changes in pesticide labels to make that resistance management language clearer, more concise, and easily available to the end user.

The second recommendation was that EPA should conduct a review of its policies and regulations to make sure it is not unintentionally getting in the way of providing end users with the tools to manage resistance.

And then moving on, the third broad recommendation from the first workgroup was that EPA should expand its collaboration and outreach efforts with other federal agencies, state lead agencies, and other stakeholders to dynamically address how they can continue to help with resistance management implementation.

EPA should also, according to the first workgroup, explore how it can encourage proactive resistance management, perhaps through cooperative agreements, updated training materials, and grant programs.

And, finally, that EPA should explore the creation of incentive programs for assistance in overcoming the hurdles associated with resistance management, so funding hurdles and incentives of growers to implement resistance management. So these are broad and ambitious.

(Pause)

NIKHIL MALLAMPALLI: Okay. So the three charge issues that this current workgroup is charged with are summarized on the slide. The first one is to assist EPA in developing implementation strategies. The second question that's developed is, can we quantify the cost and benefits of

resistance and the resistance management value in the active ingredient brands and exploring how we can get IPM strategies in the hands of the pesticide users to improve resistance management.

So these are the three charge issues that our current workgroup, which has 12 people, has been working on. We have broken down the workgroup into subgroups that are addressing each of these three items and each workgroup has the set of preliminary suggestions that Cameron is going to go over next.

So I will turn it over to Cameron.

CAMERON DOUGLASS: Great. Thank you, Nikhil, for starting us off there.

If you want to move onto the next slide, I will get going with my comments.

Great. All right. So as a matter of beginning of our update, I wanted to clarify that the following comments represent the current state of our workgroup discussions within the three charge question subgroups that Nikhil mentioned.

The update that we are going to present today is preliminary and it is very likely to change between now and the submission of our final recommendation at the May 2024 PPDC meeting. We present these today with the hope and expectation of

receiving feedback from you all in the room there.

I wanted to quickly thank the members of our workgroup for all of their work over the past few months, all the work they're going to do in the next few months, and also acknowledge folks from BPD, especially Frank Ellis and Tom Cook, who recently, in the past few weeks, have made themselves available for several very productive and candid discussions with our group on IPM topics. We really appreciate that engagement and look forward to more of that moving forward.

Our workgroup wanted to note that there is considerable overlap between two of our charge question comments, specifically the implementation and IPM groups. In the back of my head as I say this, I hear Marc Lame from our group, who frequently stresses that IPM and resistance management are inseparable concepts and you'll note this intersection throughout the comments I will make.

I will come back to this point at our concluding side, but, moving forward, our workgroup will focus particularly on converging towards a consensus set of recommendations that better accounts for the cross-cutting nature of the

recommendations across our three charge questions.

I'll also note that an overarching theme our workgroup has adopted is the important acknowledgment that effective resistance management through IPM and other means can extend the useful lives of pesticides.

Next slide, Nikhil.

In the view of the current workgroup, one of the previous workgroup's key recommendations that is relatively low-hanging fruit for EPA to act on is leveraging existing partnerships and opportunities for coordination on resistance management issues within EPA and also within the broader Federal Government. For instance, there is a precedent within EPA for the formation of working groups on specific topics and issues.

So one recommendation our workgroup is considering is proposing that EPA form an internal working group focusing on resistance management issues to better facilitate and ensure coordination on resistance management between EPA staff in DC and those in regional offices dealing with issues in the field.

With respect to the board federal family, several EPA staff already routinely participate in

meetings with the Federal IPA coordinating committee, which is managed through our office, the Office of Pest Management Policy in USDA. But this workgroup is considering recommending that EPA build on this existing participation and proactively engage with FIPMCC moving forward on resistance management and IPM. Specific topics that could be built on include broader cross-Federal Government collaboration on the collection and dissemination of high-quality information on resistance management and IPM.

To formalize this proactive engagement in FIPMCC, our workgroup is considering proposing that EPA commit to working with USDA and other federal partners on a resistance management roadmap modeled on the existing and, arguably, successful IPM roadmap.

Next slide, please, Nikhil.

Relatedly, our workgroup discussions have led to the identification of several opportunities for better coordination on resistance management issues outside of the Federal Government. The first opportunity is a possible recommendation that EPA build on existing relationships with professional societies and resistance action committees, or RACs.

EPA already has existing liaisons from several of the major relevant professional societies, including the Weed Science Society of America, the Entomological Society of America, and the American Phytopathological Society. We could encourage EPA to dig into resistance management more substantively with these societies and better leverage the existing expertise and ability within these societies to carry out research that could improve existing best practices for resistance management.

Resistance management and the application of IPM to managing resistance can vary depending on the type of pest involved and the academics and extensive specialists who participate in the professional societies are some of the best sources of high-quality information and research on what resistance management approaches work for different pests.

Similarly, there is existing collaboration between RACs and EPA that Nikhil discussed previously. So this workgroup could recommend that EPA build on these existing relationships to discuss and collaborate on resistance management issues. RACs are the organizations that manage mode of action classifications for various pesticides. So

close collaboration between EPA and RACs is critical moving forward on MOUs to maintain updated mode of action information on pesticide labels and to coordinate on effective mode of action education to end users.

Progress on resistance management will include engagement by EPA with diverse stakeholders, not only including academics and registrants, but also with grower groups, agricultural product retailers, commercial applicators, farmworkers, and others. Our workgroup is well aware that representatives of these stakeholders participate in PPDC and we especially welcome feedback from these representatives on their members' perspectives on resistance management and specifically what you at EPA and other partners could do to improve resistance management.

Next slide.

The second key recommendation from the first Resistance Management Workgroup, that our workgroup wanted to continue to work on is a recommendation that EPA critically review its existing policies, assessments, and decisions that touch on resistance management. The Resistance Management Workgroup is well aware of the competing

priorities and resource constraints EPA is operating under, but we would strongly encourage EPA management to use every available opportunity to remind their staff that pesticide resistance poses an existential threat not only to agriculture but also to the health and well-being of humans, livestock, and pets.

EPA labeling impacts the management of resistance not only through voluntary resistance management label language extending from the PRNs that Nikhil touched on, but also core aspects of directions for use, including application rate restrictions. Our workgroup has discussed that it would be helpful for EPA to have a modeling framework by which they could evaluate the quantitative resistance costs and benefits of various label changes. And the update from our second charge question group will address this more specifically.

There are existing registration decisions. For example, for the PIPs and for some over-the-top uses of herbicides, for which unique label language or terms of registration already exist to account for specific and pronounced concerns with the development of resistance. Our workgroup could

encourage EPA to, in collaboration with RACs and academic groups and other stakeholders, critically evaluate whether those unique requirements or terms and conditions have actually been effective in helping resistance management and could serve as precedents for similar registration cases moving forward.

Something that has come up several times in discussions of our workgroup is that there are aspects of EPA's recent efforts on increasing ESA compliance that have implications for resistance management. Again, we acknowledge the competing priorities that EPA is balancing, and especially with ESA, I think we all appreciate the importance of conserving threatened and endangered species. But as this workgroup works on our final recommendations, we will likely try to explore specific ESA-related mitigations that appear to have negative resistance management impacts and discuss whether there are possibly alternative medications without those negative implications that could still allow for meaningful reductions and exposure to listed species.

Next slide.

I mentioned this briefly, but the second

charge question this workgroup has been working on was the development of a cost-benefit framework that could allow EPA to more quantitatively consider resistance management tradeoffs. We are actually going to come back to this topic after I discuss the third charge question group and we will allow George Frisvold with the University of Arizona to present his preliminary framework for that charge question group.

So I will move on to the third charge question and then we will come back to George's presentation.

Next slide.

I have already mentioned IPM several times in this update, but we will focus a bit more on that now as I discuss possible recommendations from the third charge question group.

The first possible recommendation being considered is that EPA explore existing internal IPM programs that could be leveraged for resistance management efforts. For example, EPA has a very successful IPM center with great experience in outreach through webinars. So we could propose that the IPM center include resistance management topics in those webinar series moving forward.

Additionally, the IPM center could partner with FIPMCC and other federal agencies, such as CDC, on broader public communication efforts improving the dissemination of information on leveraging IPM to manage resistance across pest control disciplines.

Lastly, our workgroup could recommend that EPA explore whether there are opportunities in existing funding streams within EPA for grants to support the effective diffusion of IPM practices for resistance management.

Next slide.

A second broad recommendation that this charge question group is considering is that EPA explore how they could remove existing barriers to the use of alternatives to conventional pesticides so that pest management practitioners have quicker access to biopesticides or biological control agents. Under FIFRA, EPA has broad regulatory authority over many pest management chemicals, agents, or devices and, as such, this workgroup could recommend that working with industry groups, as well as federal partners and other groups, such as USDA-funded Regional IPM Centers or the IR-4 Program to develop effective, nonconventional pest

control methods.

While this could involve offering financial incentives through existing federal grant opportunities, EPA already effectively incentivizes commercialization of some of these types of pesticides through the reduced risk program. This workgroup could suggest that EPA revisit the reduced risk program and evaluate whether there are new opportunities or expediting the review nonconventional pesticides, agents, or devices.

Relatedly, our workgroup could recommend that EPA determine whether it could make broader use of the list of minimum risk pesticides under Section 25(b) of FIFRA to allow for the use of certain biological control agents or nonconventional pesticides outside of the typical registration pathway.

We acknowledge there's an ongoing effort by EPA to revisit the process for petitioning for additions to the FIFRA 25(b) list and this workgroup would appreciate, on this effort from EPA, to understand whether a more efficient listing process could more quickly bring less risky nonconventional products and already naturalized biological agents to the field, reducing the reliance on conventional

pesticides to manage pests.

Next slide.

So as I mentioned, we will shift over to George now to give him time to present his charge question group's work on a cost-benefit framework. But after his presentation, we welcome any feedback PPDC members have on our preliminary recommendations.

I will wrap up by reminding the audience that this is the second iteration of the PPDC working group focusing on resistance management. So we see this as our last good opportunity for PPDC to weigh in on improving EPA's ability to assist in effectively managing growing and, in some cases, already critical issues with pesticide resistance.

Our aim with our final recommendations due in May are to have clear and operational suggestions for EPA and, as appropriately, other federal agencies and stakeholders to substantively improve the chances of practitioners and end users effectively managing resistance.

Now, hopefully, we will be able to turn it over to George, who is also presenting virtually, and he will be able to present his draft framework for cost-benefit analysis.

GEORGE FRISVOLD: Good morning. My understanding is that you folks are advancing the slides.

JEFFREY CHANG: Yes. We are pulling them up. Just one second.

GEORGE FRISVOLD: Okay. So what I'm going to introduce today is a general framework to quantify the risk and benefits associated with both resistance and resistance management.

Next slide, please.

The first thing is what to measure. So the cost and risk from resistance. So there is losses to producers and consumers from reduced efficacy. There is also possible shifts to substitute compounds if there is resistance to the chemistry with something else that has greater environmental or human health risks.

There's also cost risks associated with alternative risk management practices. And there are two critical timing questions that affect estimation of the cost and benefits. These are when does resistance occur without resistance management and then when does resistance occur with management.

Next slide, please.

So how to measure the cost of resistance,

so the benefits of resistance management are the avoided costs and risks from resistance. The costs of resistance are similar and they could be estimated in similar ways as costs of pesticide cancellation. One can think of resistance as nature's cancellation.

There are long-established methods that economists use to estimate the cost of pesticide cancellations. This is the negative of the benefit of the compound. So if there is a cancellation and also if there is resistance, producers must shift to different compounds or control methods. These can have higher costs, they can provide less yield protection, which affects the quantity produced. They could provide less protection of quality, which affects the price that agricultural producers receive. Also, the new compounds or the new strategies have potentially greater environmental or health risks.

Next please.

So what are the steps in quantifying resistance costs? So this, again, is very similar to looking at cancellations as you identify substantive compounds or control methods and quantify their production performance and

attributes, and this is historically done by looking at expert surveys, market shares, single best substitutes, various analytical models, field trial demonstration data. Now, there is also more proprietary private industry data on what producers are using that is also available. One could also obtain environmental human health risk profiles of alternatives from preexisting assessments.

And so one can use the change in production attributes as inputs into regional or national commodity supply and demand models. And so one could model yield and cost changes and supply curve shifts, quality changes as demand curve shifts. Past research, looking at cancellations, shows that impacts very quite significantly across crops and regions. This is likely to be true for resistance as well.

Next slide, please.

So in quantifying resistance management costs, one can follow pretty much the same process. One can look at field trial demonstration farm data. Extension recommendations -- you know, all throughout the United States, extension weed specialists are making recommendations to stave off resistance. One can evaluate the economic

implications of adopting those practices.

There is biological models of alternative practice. Some examples that have been -- people have looked at already in the literature is rotating herbicides across years, diversifying modes of action. The most classic example of looking at resistance management costs and comparing it with the benefits of staving off resistance is evaluation of the PIPs. There has been probably more headway in this than anything else, but looking at the cost and benefits of refuges over time. The cost of refuges are foregone gains on the refuge acreage and the benefits are the lengthening of the efficacy of the compounds.

Again, one could obtain human and health risks from preexisting assessments for the chemistries that would be used as part of risk management and, again, use changes in production attributes as inputs and regional economic models.

Next slide, please.

So in principle, one could conduct benefit-cost analysis of resistance management. With resistance management practices, the short-run returns may be lower, but the long-run returns may be greater. So one might be substituting small

negative short-run supply shifts to avoid larger long-run negative supply shifts and one could then just apply standard multi-year benefit-cost analysis to estimate the net present value of resistance management.

This doesn't really call for anything radically new. One could just follow current EPA principles and guidelines for doing benefit-cost analysis.

Next slide, please.

Next, please. There we go. Thank you. Whoops, one back, please. Perfect.

So now the hard part, what I laid out are things that are very, very straightforward and are things that economists have been doing literally for something like 40 years to evaluate the benefits and cost of pesticides becoming available or unavailable.

But the results on resistance management depend on two questions. When would resistance occur absent resistance management and how long does resistance management delay the onset of resistance?

There is different options for doing this that have been applied in the literature. One is basing things off of biological and genetic

modeling, which has a stronger scientific background, but is often more difficult to do and very difficult to do for multiple crops in multiple situations.

An easier method is to more or less arbitrarily choose different years and conduct sensitivity analysis to see which areas might be of higher risk for resistance or not.

And in terms of priorities for measuring where resistance might be a problem, there's two things to think about. One is breadth. So how widely used is this compound? What does preexisting literature or assessment suggest would be the cost if something became unavailable if resistance occurred?

One could think of, oh, let's say thinking about hypothetically, if people were actually asking, what if widespread resistance to glycophosate occurred. If they were asking this back in 1995, we might have different outcomes than we have today.

Another issue is depth, this is where colleagues and the working group were very insightful. There's a lot of compounds that aren't widely used, but they are really critical for

particular specialty crops or specific content -- context.

So resistance costs could be looked at not just in terms of breadth, like is this something used for multiple large acreage crops, but in terms -- percentage terms. So there might be some smaller valued crops in an absolute sense where resistance creates high percentage reductions in production and in income.

Next slide.

So some considerations, you know, questions. We are not at the recommendation stage yet, but how does registration or cancellation decisions affect the availability of effective modes of action? So more specifically, how might cancellation of compound X affect resistance management for compound Y? You could flip this around. What is the value of the new compound X in helping to delay resistance for compound Y?

And at a minimum, even if these things are very hard to quantify, these things could be described and characterized.

A lot of the -- the next point is, a lot of the next results that would be used in this kind of more formal, you know, broad-scale benefit-cost

analysis could also be used as inputs to put into farm models and decision support tools for education and extension.

There is a Palmer Amaranth Management model developed by the University of Arkansas. There is a Ryegrass Integrated Weed Management model dealing with resistance in Australia. So if -- one direction for managing resistance is not necessarily regulatory, but providing people with education tools. This could give growers information about the long-term benefits of managing resistance to get voluntary adoption.

The results could also inform cost-share programs. One could look at the benefits of providing economic incentives to adopt particular resistance management tactics. There is already private rebate programs that the private sector has initiated. I don’t know if these are really in the scope of EPA, but we know that the USDA has EQIP and CSP. They have cost share programs to create economic incentives for adopting conservation practices.

A challenge with these programs is achieving what is called additionality. Whenever you have incentive payments, there are some people

who might be adopting the practice anyway, absent the payments. So payments to that group is only an income transfer without any additional benefit. The payments could be too small for other groups. So even with payments available, people may not adopt. So threading that needle of actually having incentives large enough to the particular group to get them to change their behavior is always a challenge.

And those are my slides. Thank you very much.

NIKHIL MALLAMPALLI: We are done.

ED MESSINA: Time for discussion.

NIKHIL MALLAMPALLI: Yes, please.

ED MESSINA: Again, I know we're a little over, but we'll make it up with the break and then lunchtime.

JEFFREY CHANG: Mayra, name and affiliation, please.

MAYRA REITER: Thank you, Mayra Reiter, with Farmworker Justice. I would like to thank the group for the great presentation. I would like to express support for the recommendations that were made earlier about IPM. I would like to mention, though, there are people out there implementing what

they call IPM, which is really we just keep using the same pesticides we have always been using, the same conventional pesticides, but we just try to use them more judiciously. But that's not really what IPM is.

And some of our farmworker groups and environmental groups favor the definition of IPM by the University of California - Davis, which says that IPM is an ecosystem-based strategy that focuses on the long-term prevention of pests or their damage through a combination of techniques, such as biological control, habitat manipulation, modification of cultural practices, and the use of resistant varieties, and pesticides are used only at monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism.

Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.

All these factors are important to take into account when we are talking about IPM to ensure that not only the environment, but the communities who live around agricultural areas, the farmworkers,

that everyone who is involved in the system that wants to consume the food, that everyone is properly protected.

Thank you.

JEFFREY CHANG: Nathan?

NATHAN DONLEY: Nathan Donley, Center for Biological Diversity. I kind of want to acknowledge two kinds of competing views here that this workgroup seems to be grappling with. One is, you know, when one sort of wants to use more pesticides as a way of combating resistance, you know, getting new modes of action on the market, combining them, and in the short term, that works. I mean, you know, if you've got a new pesticide, it kills the pest you're targeting, it's going to do the job, but that road ends eventually. There is only so many modes of action. There is only so many combinations you can do.

And the other competing view is, let's address the larger issue. You know, it's not something that is easy necessarily to do in the short term, but it has -- it's a road that goes somewhere. And that is, you know, the charge question three that you are talking about, about using IPM. And I have the same, worries about

differing definitions of what IPM means and it can be used in a way that it's not necessarily intended.

But, you know, I would like to see this workgroup really prioritize the IPM part and the pesticide reduction part because I think that is where -- that's where the future has to be. That's where the road goes.

And I also want to acknowledge that there was a lot of talk about the cost benefits from the point of view of what are the costs and benefits of implementing certain resistant management programs in place. You know, what are the costs of doing that, what are the benefits of doing that?

I also want to acknowledge a separate cost-benefit issue which is one that has not been adequately addressed and that is when you start combining modes of action, you're starting to increase the complexity of those exposures to people in the environment. And, you know, when you suggest you use glyphosate on your crop 20 years ago and now you're using five herbicides, the exposures become very different and EPA's risk assessment process doesn't analyze that.

If you have a pesticide product that has multiple pesticides in the bottle, there are some

studies being done on that, but most of the mixtures we're talking about are tank mixtures and that is just not existent in the risk assessment process. So the costs aren't accounted for. So there can't be a true cost-benefit analysis when you're not analyzing all the costs of what it means to people in the environment when you're combining all these things together when those exposure scenarios didn't happen 20 or 30 years ago.

Yeah, so I just -- I want to acknowledge that and thank the workgroup for its work and hope you prioritize work on charge question three moving forward.

JEFFREY CHANG: Mark?

MARC LAME: Thank you. So first of all, since coming onto the PPDC a year and a half ago, I was impressed that the agency saw that there was some real importance to resistance management, and I am further impressed that the PPDC decided to have resistance management 2.0. So that is encouraging to me. I think -- I want to address two things. I want to address two things.

One is the regulatory side of resistance management, just in short, and the other one is the true diffusion of IPM. And I'll try to keep it

reasonably short, but I want to preface everything with two things. One is is that the -- again, the agency must feel that this is important as a matter of being mission-oriented. And I hear a lot in this group and, rightfully so, that we are worried about what is the effect on the grower and what is the effect on the industry. And that's important.

But from a mission statement position, I would assume that the agency wants resistance management because it will lessen the exposure of toxicants, pesticides, which might be harmful to human health in the environment. And that's the mission.

And so if we use -- and, of course, what is neat about these economic models is that they are going to show more of this stuff and provide the science behind it, but we already have about 60 years of science on this kind of stuff.

One of the things we're going to have on our final report is kind of a Resistance 101. But the only thing you want to address to this committee before they have to vote on that stuff, is that there is a concept called a pesticide treadmill. It's not merely resistance; it's the concept. And this is from Van Den Bosch.

For me, as a baby entomologist, there was Silent Spring and then there was Van Den Bosch's pesticide treadmill. This is back in the early '70s, and with the concept being that there's not only resistance, but with resistance, you use more pesticide because you need it to work. You know, we want to keep food on the table, so we use more and more and more, and that sounds like a treadmill.

But it is not just that. The treadmill is is that in using more and more and more, it gets rid of more and more natural enemies. So things just get really bad. In which case, in the late '60s and early '70s, things got so bad with the over-reliance on DDT toxaphene, that the treadmill caused a crash. And farmers basically said to USDA at that time, hey, we are in trouble and we need help. Therefore, that is when integrated pest management was kind of born as a concept at the same time this resistance was born. So resistance management and IPM, twins, as I keep saying.

So farmers, you know, they took it on because they had to. They did not have an alternative. So scouting programs, et cetera, et cetera, happened and, you know, it's been just great as far as that goes.

So from there, I'm going to go a little bit and link the regulatory side of this to it. So the backbone of IPM, for those of us who really practice real IPM, the backbone is monitoring. If you don't have a monitoring program, you are not doing IPM. Okay?

At the same time from a regulatory viewpoint, particularly when it comes to conditional registrations like with what we are doing with some of the over-the-top registrations at this time, if there is not a robust monitoring program with regard to incidents of all different kinds, there's going to be some big problems. So you can't manage what you're not measuring, so -- whether it is insects, weed infestations, or the compliance of a conditional registration. So the agency needs to, as we move towards this, needs to perhaps relook at whether or not they are holding industry's feet to the fire with regard to conditional registration.

Then going back to IPM, we need to think about what real diffusion is when it comes to integrated pest management. Integrated pest management is an environmental innovation. Integrated pest management is one of the original pollution provision programs that the USDA and EPA

held out to protect human health and the environment at least with this agency.

So but what typically goes on is we provide information and we have great webinars. And, you know, extension people -- I'm an old extension guy -- we want to hand out fact sheets and information, but we learned early on that that is not diffusion, that does not get individuals or, more importantly, communities, like farming communities, to adopt the IPM or resistance management innovation.

So there needs to be some reconsideration of this idea that okay, we are doing it because we are giving out webinars and giving fact sheets. We need to get back to some of the old extension models of demonstration, in-field implementation, confirmation, letting farmers, you know, know how good a job they are doing, even getting them good press if that is what it takes for confirmation. So that is diffusion.

So when we turn in our report next time, we are going to try to cover those areas as well. So I just felt that it was incumbent upon me as the IPM guy, but -- and a little bit of an historian just by virtue of the color of my hair -- could say

that, you know, we are moving forward and this is important. It is an existential threat to the farming community, but also to human health and the environment.

So this is important stuff and I congratulate the agency for addressing it. Thank you.

JEFFREY CHANG: We're going to move to the three people in the room and Mark online. Dawn?

DAWN GOUGE: Dawn Gouge, University of Arizona. I'm going to start by saying that speaking just for insecticides because I'm an entomologist, insecticide resistance has outpaced innovation at this point. I'm going to start with that. I'm going to finish by suggesting who I think will be blamed for this catastrophe.

So, look, pyrethroid resistance in malarious areas is causing hundreds of millions of cases of malaria. I think the 2020 number -- I looked it up before we spoke, before yesterday actually, was 241 million cases. Now, most of those are in sub-Saharan Africa, like 97 percent of those cases. So maybe you think that is not actually going to be an issue that we need to be concerned about in the United States, but we have had malaria

cases -- endemically transmitted malaria cases in the U.S. this year. And that is expected to continue.

So now, you may also be thinking, oh, but we haven't been chucking pesticides at enough anopheles mosquitoes in the U.S., so we don't need to worry about it for a while. There were drastic reductions in the numbers of cases since 2015. Since then, because of the resurgence of the disease cases as a result of one primary reason, was they (inaudible) through (inaudible) bed nets. Because of that established resistance, the mosquitos that arrive in this country don't assume they are not coming with dramatically high levels of resistance already within their own genome. So look, that is going to impact the life -- everybody's life in the U.S. at some point.

My work colleague, George Frisvold from the University of Arizona, may dispute or may support this estimate, but one estimate of just what pesticide resistance costs in the U.S. per year is approximately $10 billion. So even if you are not worried about sub-Sahara in Africa and the small outbreaks of malaria in the country right now, that should generate some interest for everybody in the

room.

There has been relatively little advancement in traditional herbicide MOAs for decades. There has been other wonderful transgenic innovations, but in traditional herbicides, which some groups to rely upon in some ways, there has been relatively little advancement.

Farm level decisions are made socially quite often. This is not going to be a problem that cannot be ignored if we are going to find a solution to this problem. This has to take a transdisciplinary IPM approach. It has to or we are not going to get a sustainable solution for any of these complex resistance issues.

Pesticide resistance incentives are going to have to be tied to either -- I don't know -- subsidies -- the USDA already subsidizes some crops. I don't see why this would not be something that might fit into the existing systems. Or even just some of the insurance premiums that growers have to -- and producers have to pay. There are mechanisms that we can use to incentivize growers and producers.

I'm nearly finished, I promise you.

So, you know, Monitoring, Nikhil just captured it right at the beginning in one of his slides where he talked about, you know, we are going to scout, we're going to be strategic here, and then the third step is how -- what was the efficacy of those measures that were taken. That is the part that frequently is missing in action, if you ask me. I could give you lots of examples, but I will stop there.

All right. So whose fault is this going to be? Whose fault is it? Irrespective, right or wrong, I would anticipate the EPA would be left with holding the can on this, not that I would support that, but I can tell you that it's probably going to show up at your door at some point. It will be your fault. Sorry.

Thank you.

JEFFREY CHANG: Joe?

JOE GRZYWACZ: Joe Grzywacz, San Jose State. And only on the heels of that pretty daunting and scary premonition into the future, I'm going to begin with, you guys have to take a clue from Tajah and you got to change your name. EPIC is nowhere near RRWG. So, you know, think of a way to change your name just to try to change the tenor of

the room just a little bit.

Point number two, it comes back to a comment that I made yesterday. Science is a valuable, valuable tool, but if we keep going down the route of better and better physiology, chemistry, biochemistry, that path, as Nate has said, you know, kind of leads in one direction. So I just simply want to kind of come back to that point of sometimes science and reason, right, you know, the whole continental divide of Western philosophy going back to the 1700s, we're at that place again where science can take us so far, but then we also have to pick up with human reason, human agency, human rationale to recognize that people, at the end of the day, will be people.

If a little bit is good, more is always better. Kind of like butter, kind of like cheese, kind of like garlic, right? If a little is good, more is better. And we have to recognize that that is an idiom of human existence that all the science and fact sheets and reports are not going to change the minds of people, unless there is levers attached to it. Like, all right, you want me to take a short-term hit on my gains, give me some tax deductions or some tax credits so that I can make it

to those long-term benefits that I might get if I adopt this process.

Because it's really easy for economists to be able to say -- no offense to the economists on the phone -- it's really easy for economists to say, but the long-term gains are going to be there because the short-term gains are on the backs of any given farmer, owner, operator in some way, shape, or form. So that means that there needs to be a short-term release to be able to facilitate some of the behavior change.

Now, those are outside of the purview of EPA, of course. But it speaks to the point of, at one point or another, you can only science this to death so much. It becomes a matter of will and we need to help people see the will that is involved in that and be able to pull lever A that says, I'm willing to take the short-term risk for the long-term potential, but I need a bridge to be able to get there.

JEFFREY CHANG: Damon?

DAMON REABE: Hey, Damon Reabe with the National Agricultural Aviation Association. I just wanted to provide some perspective from the field as a pesticide applicator. My two companies in

Wisconsin perform about one-half a percent of all the aerial application that happens in the United States. A half a percent is not a lot, but you are hearing from somebody who does a lot of aerial application.

Our business was started by my grandfather protecting canning vegetables, peas, sweet corn, green beans, from primarily insects. That began in the late 1940s. There was a lot of pea production in -- and there still is -- in Wisconsin and it would be destroyed by the pea aphid. To this day, that is a major pest in pea production.

To kind of give you some recent highlights in what the pest populations have been in peas, in 2018, we had a pea aphid outbreak that resulted in most of Wisconsin's pea pack getting sprayed with -- getting at least one insecticide treatment and sometimes a second insecticide application treatment was necessary.

In 2023 -- remember, the Wisconsin pea production is measured in tens of thousands of acres. We sprayed 300 acres for pea aphids. So there is monitoring. It's intensive; it's highly financially motivated because the chemicals cost money and the application costs money.

Our pea crop this year was an absolute record. There has never been a bigger pea crop in the State of Wisconsin than what happened in 2023. And so the only pesticides applied to that pea crop would have been some -- potentially some herbicide applications, depending on when it got planted, depending on when the weeds emerged, but the lion's share of Wisconsin's pea crop was raised without a singular pesticide application, which is remarkable. And that happened not because farmers chose not to spray at all. It happened because they couldn't find the pest because the field are being monitored.

Another what has been what I would term an extraordinarily reliable pest in Wisconsin has been corn ear worm in sweet corn production. The monitoring system is conducted by the companies that contract with the farmers that ultimately can and freeze the sweet corn. They have a pheromone trap that works throughout the state and they monitor those traps for the presence of the moths. When there's enough moths there, they then will get a hold of us to start spraying.

In 2023, it was the latest date that we began spraying sweet corn in the history of our

family business. We started on August 20th. The sweet corn pack is also very large in the State of Wisconsin and that August 20th start date meant that two-thirds of the sweet corn pack didn't need any treatments of insecticide for corn ear worm. Conversely in 2010, we started in mid-July. And it's all based on this trapping program and based on the findings of these moths.

I don't want to bore you with example after example after example, but I'm not experiencing, in our business nor my immediate friends who have businesses throughout the country, just people walking in the door to spray their fields to just spray their fields because they had to do it last year. It's always based on scouting.

Our spray schedule in potatoes is built around the scouting schedule. So X field gets sprayed on Thursday, for instance. It's picked -- Thursday it's picked because the field gets scouted on -- typically on either Tuesday or Wednesday. That's why they pick Thursday. They want to look at the field to see what's there to know, A, if we are going to spray and then B, what will we be spraying it with.

The last point I'd like to make, I just

spoke with a gentleman who is working for a seed company and he's doing research on white mold in soybeans. The research that is being conducted by the seed company is to determine how to break the life cycle of white mold in soybean production. I'm sure they would ask that I not talk about what they are working on in a public forum, but what I can say is what they're working on is actually changing the structure of the plant to break the life cycle of the very destructive pest so that pesticides aren't needed to be used in order to control them.

I realize this is far beyond the purview of EPA's part in this, but I think it is really important for this committee to understand how much effort, how much money, how much time is put into -- I'm going to just -- I just remembered another one. We had an armyworm outbreak in wheat this year. I can't tell you how many hours I spent on my hands and knees trying to decide if the -- you know, are the armyworms there, number one. Are they too big to be sprayed? Is there enough of them? And then going back to make sure it worked.

So this is, in fact, happening, and I think it's been important for this committee to understand that.

Thank you.

JEFFREY CHANG: Mark Johnson virtually and Gary and we're moving on.

MARK JOHNSON: Thank you. You'll have to figure me for no video this morning. I know in the past I have brought this up to the EPA and the PPDC before. The resistance issue is significant, but not only in agriculture. So consider more than 60 million acres of turf and consider that even multiplied by other valuable green space in the U.S. and the value and the benefits of that green space and turf, not just the 15,000 golf courses.

The fact is, it's very valuable. The erosion and all the other benefits which I won't get into focus on resistance before decisions are ultimately made. A lot of the work on economics based around agriculture and production aren't available in the similar manner for turfgrass and other green space.

I think it is significant that this committee is working on this. I think it is significant that the PPDC is discussing it. Just from these comments this morning, we all know the depth and breath of this topic is enormous. But we have to keep the needle moving in research, and the

work that the USDA in specialty crop financing, that has to continue because these men and women that manage these green spaces come to education every year in their states. They are exposed to IPM and they are exposed to resistance, but they need alternatives in many cases when single products exist and there is none.

The fact is IPM and best management practices to our industry and golf are significant. And I know the EPA knows that. And in many others of the green space, a lot of industries are following in this suit and it's very important.

We are committed to the environment; we are committed to human health. And it's been said already that the cost of application chemistries are not cheap. The labor to apply these chemistries are not cheap, but the fact is, with weather extremes and things, every environment is different and weather extremes are causing influences today that the practitioners have to deal with.

IPM is a significant part of it. We're focusing on it. But when it comes to resistance, we need to invest in the future. And I would encourage the EPA, as you work through this resistance committee, keep it going, keep this on the table for

future because it's going to be significant. And when you make decisions, consider more than row crops, as you've heard me say before.

And I like the comments from one of the gentleman today, incentives. Incentives are going to be significant. That will help you achieve success with your mission of the EPA and not just regulation. It's important because we rely on the university scientists for their recommendations. There are representatives on the ATRAC and the other resistance committees that know this and they know what exists in ag, they know what's out there in turf, but we need more.

And I just want to keep that on the record that the 60 million acres of turf is one drop in the bucket of green space and it's more than ag, and I think as we work on this topic, we should not lose sight of that. But the other half of it is that investment in the research to drive solutions and that education, there are opportunities for it in existence, but we have to fuel that education with these scientists to provide those best practices and achieve success here.

Thank you for allowing me my comments.

JEFFREY CHANG: Gary?

GARY PRESCHER: Well, thank you. A couple of personal comments and then regarding some research of other things. But from a personal standpoint, I see that we have opposing ideas here. For example, when I look at the climate change initiatives that the industry and I am adopting on my farm, it creates opposing forces. All right?

I am working at understanding and adopting crops, for example, okay, for obvious -- for good reasons and conservation practices, you know, no till for good reason. All right? It minimizes erosion, the runoff issues that we all understand, air quality, greenhouse gas emissions, all those things that we are becoming aware of in our industry.

So I just understand we need a toolbox to work with those initiatives and that side of our industry that there's a lot of focus on right now. All right? And that toolbox includes IPM. And I think there is some really good opportunity to reset that with the next generation and younger generation of farmers that live around me. They are very interested in the environment. For example, soil health practices, they are the ones that really adopted the practices in my neighborhood, you know,

and -- so there are some opportunities to reset those -- that bar and reeducate out there in terms of IPM practices, the importance of it.

And then just to build on Damon's testimony here, you know, because USDA and our state entomologists worked with soybean aphids and predators, you know, and introduced some new predators into that. Millions of acres haven't had to be sprayed now for soybean aphids in Minnesota where I live because of that type of research. So things continue to evolve. Yes, resistance has been a long-term problem and it is not going to go away, and I'm thankful for the research we have going on in all the different sectors, be it industry, be it land grant universities, be it the EPA.

So one other good news, when it comes to weeds, I know the NCGA and others have started to invest in weed seed technology, destruction research. Okay? So that would be something that -- and that's because things get so bad out there where, you know, you just can't use herbicides to control, for example, the rye grass or Palmer amaranth. So some of these other technologies are being researched now and potentially can help us down the road with at least

weeds.

So I just want to thank you for the time to make those comments and appreciate it.

ED MESSINA: Thanks.

Can you come back at 1:30 so we can do any motions? Yeah? Okay. So I think what we'll do, we'll do the motions at 1:30 at the other session rather than doing them now.

UNIDENTIFIED FEMALE: Yeah, that's fine.

ED MESSINA: So we can cut out some time.

UNIDENTIFIED FEMALE: How about a five-minute break?

ED MESSINA: A five-minute break and then we'll come back and do EJ and then we'll eat a little bit into lunch, but we'll make sure you guys have some time for lunch. So, thanks, everyone. Five-minute break.

(Break.)

ED MESSINA: Also, if you arrived today and weren't here yesterday, please sign in on the sign-in sheet. We're using it to ensure that we have a quorum, which we did have yesterday and we have today as well. It's 20 plus 1, is the quorum, and we've reached those on both days. But I wanted to make sure that, you know, Jim and Mano got to

sign in and others who joined today. And welcome and we'll try and do an introduction at the 1:30 spot so you can say hi to everyone and tell everyone who you are. Thanks, everyone. We'll get started.

BILINGUAL LABELING AND OTHER ENVIRONMENTAL JUSTICE ISSUES

JEFFREY CHANG: Now, we will be led by Mike Goodies, Deputy Director of OPP, in bilingual labeling and other environmental justice issues.

MIKE GOODIS: Great. Thanks. Thank you, Jeffrey.

So I'm pleased to chair this session on the environmental justice-related work here at EPA and, in particular, bilingual labeling. You'll see on the first slide here this segment was from 10:40 a.m. until 12:00. So I already failed in that area, but we'll try the best we can to move things along and we'll make adjustments as we go forward.

So here's the agenda. I'll walk through it quickly so you know what to expect. I'll kick things up with just an update on an Executive Order regarding environmental justice.

Then Steve Schaible from our immediate office here in OPP will give you an update on PRIA 5 implementation specific for environmental justice-

related type activities. Sue Bartow from our Pesticide Reevaluation Division will give you an update on bilingual labeling efforts, and then Aidan Black, also from our Pesticide Reevaluation Division, will give you an update on various worker protection activities.

And then we have a special session, our very own Mayra and Mily will give us farmworker perspectives on bilingual labels and, I think, maybe some other worker-related issues, and then we will have discussion time and we'll adjust the times. Depending on where we are at, we'll make adjustments with times.

In the PPDC meeting in May, we shared with you some information on some recent Executive Orders, in particular, for advancing racial equity and support of underserved communities and then an update on that order as well. What I wanted to do in this session was share with you again, another fairly recent order. This one was signed by President Biden back in April of this year. And this one builds upon prior orders advancing environmental justice and modernizing and improving how the Federal Government confronts environmental injustice.

So this order is -- achieving environmental justice as part of its mission includes 16 directives for agencies, such as identifying, analyzing, and addressing disproportionate and adverse human health and environmental effects and hazards; federal activities; and also evaluating relevant legal authorities.

The Executive Order also expands the definition of environmental justice to mean just treatment and meaningful involvement of all people, not only with regard to income, race, color, or national origin, but also tribal affiliation or disability. The definition also includes full protection from hazards, but also equitable access to healthy, sustainable, and resilient environment.

So federal agencies are being directed to address the effects of climate change, cumulative impacts of environmental and other burdens, historic inequities, and systemic barriers.

So I brought this up because I wanted to point out that, you know, again, the topics we are talking about here in this session on bilingual labeling and worker protection activities, some of those are driven by our PRIA 5 statute, but some go

beyond that as well. But I also wanted to share with you we have a number of other environmental justice-related activities taking place within our program.

For instance, you know, we have feedback recommendations from other advisory committees regarding children's health and looking at ways of improving or evaluating take-home exposures from farmworkers and also for youth in agriculture and exposures that they may be receiving also in the field.

Also, we are looking to expand our assessments in considering bystander exposure for different populations as well. Part of PRIA 5 also authorizes continued funding for the SENSOR incident data. So we are trying to explore how better to use that information in our assessments as well.

Ed mentioned during our program overview the risk concerns -- cancer risk concerns from ethylene oxide. So there's an ongoing effort with that with other parts of the agency for making sure that we put in protective measures for people that live -- not only workers in a facility -- sterilization facility, but also communities around the area. And we are also exploring looking at --

for potential pesticide exposures from groundwater sources. Many of them located in farmworker communities.

So those are just a touch of some of the other types of activities. I just didn't want you coming away thinking that what we are talking about today are the only ones that we're actually pursuing and exploring.

So with that, I will turn it over to Steve Schaible, and, again, he will give an overview of PRIA 5 and some of the EJ-related activities.

STEVE SCHAIBLE: Hi there. My name is Steve Schaible. I am the PRIA coordinator in the Office of Pesticide Programs, according to Mike and Ed. And I'll kick this off with an overview of PRIA and PRIA 5, as soon as I figure out the remote.

The Pesticide Registration Improvement Act, or PRIA, was first authorized in 2004 and created a registration service fee system whose purpose was to provide additional resources to OPP in order to achieve more predictable and faster registration decisions on registrant applications. In addition to establishing fee categories and decision time frames, PRIA and its reauthorizations have included a variety of provisions important to

both industry and NGO stakeholders.

EPA serves, as an aside here, in an advisory capacity in develop into each of these bills, offering technical assistance to the PRIA coalition and to Congress, the PRIA coalition being a diverse group of pesticide stakeholders, including the NGOs and industry trade associations.

PRIA has been authorized four times since the initial law, the most recent being the Pesticide Registration Improvement Act of 2022, or PRIA 5. This was signed into law in December of last year and was actually -- this effort was a year early. PRIA 4 was to go through 2023, and I will say that we all agree that, given the current circumstances, that ended up being a wonderful gift.

So getting into PRIA 5 specifically and some of the EJ provisions in PRIA 5, PRIA 5 continues and introduces a number of set-asides from maintenance fees that are relevant to environmental justice. These include new set-asides for farmworkers. First, for farmworker training and education, this replaces and increases funding for a previous worker protection activities set-aside under PRIA 4 and also adds different provisions, sort of targets who can apply for those grants and

stakeholder input into those grants.

Secondly, healthcare provider training relating to the recognition, treatment, and management of pesticide-related injuries and illnesses, as well as the development of informational materials for the technical assistance and training of healthcare providers.

PRIA 5 continues maintenance fee set-asides for partnership grants as well as pesticide safety education programs. It creates a new set-aside to support the interagency agreement with CDC NIOSH to support the SENSOR Program for pesticide incident surveillance with the goal of increasing the number of participating states in the SENSOR survey, as well as prioritizing expansion in states with the highest number of agricultural workers.

PRIA 5 amends FIFRA to require bilingual Spanish language translation to end-use pesticide product labels. Specific deliverables or deadlines in 2023 had to with outreach to farm -- to the stakeholders regarding ways to make bilingual labeling accessible to farmworkers. There was a due date in PRIA 5 that that activity needed to occur by June of 2023.

Secondly, PRIA 5 indicated that EPA is to

cooperate and consult with state partners on the implementation of bilingual labeling. All these activities occurred -- we were quite active in that outreach in 2023. It is worth noting that while the June deadline was met, EPA views these are ongoing conversations with those stakeholders. I don't think we view that we're going to stop those conversations in 2024 or beyond.

At this point, I'm going to hand off to Sue Bartow, who will be going into greater detail on bilingual labeling provisions and EPA activities to date on that.

SUE BARTOW: Hi, everyone. My name is Sue Bartow. I'm a chemical review manager in the Pesticide Reevaluation Division, and I'm a member of OPP's Spanish Labeling Workgroup, and I'm going to do an overview of the PRIA 5 bilingual labeling requirements and then give you the highlights of what we have been working on to address those requirements.

So as Steve mentioned, PRIA 5 amended FIFRA, requiring Spanish language translation for sections of the end-use pesticide product labels where a translation is available in EPA's Spanish Language Translation Guide. The Spanish language

translation must appear on the product container or a link to the translation via some sort of scannable technology or other electronic method must be on the product label.

The Spanish Translation Guide that the agency had put together can serve as a resource for pesticide registrants as they translate sections of the pesticide labels and the Guide focuses on the health and safety portions of a label. If the guide is used, that will assist with accuracy and also consistency in Spanish language on the pesticide labels.

Next slide.

The PRIA 5 provides deadlines for the various bilingual labeling requirements and it includes a rolling schedule for the Spanish language translations to appear on product labels starting with the most hazardous or toxic products first. The restricted use pesticides are the first ones to require the translations and that is due in December of 2025. Also, agricultural products that are not RUPs, but have a Tox Category I will also be required to have the translations in December of 2025.

Agricultural non-RUPs that have an acute

tox category of II are due within five years or by December of 2027.

PRIA 5 includes deadlines also for antimicrobial products and nonagricultural products. Those that have acute Tox Category I will be required to have Spanish labeling translations within four years or by December of ‘26. And for those products with an acute toxic category of two, their translations are due within six years or by December 2028.

All other pesticide products are required to have the Spanish translations within eight years or by December of 2030.

PRIA 5 also provides timing provisions for when or if the Spanish Translation Guide is updated. Specifically, it says the agency must notify registrants within ten days of updating the Spanish Translation Guide, and it also provides timing for when the labels must then be updated. So generally, for ag use products, it’s one year after the Guide is updated that the labels must be updated and, in general, for the antimicrobial and non-ag products, it is two years after the Translation Guide is updated.

Next slide.

There are also implementation requirements in PRIA 5, specifically label changes to add the bilingual labeling are to be implemented through a non-notification process. The non-notification process means that a product label may be updated with the Spanish translations without notifying EPA or EPA reviewing the label as long as that is the only change being made to the label.

PRIA 5 also outlines additional requirements, including specific timelines for their completion. Some of these requirements are that EPA must cooperate and consult with state lead agencies for pesticide regulation to implement bilingual labeling. EPA must seek stakeholder input on ways to make bilingual labeling accessible to farmworkers and, as Steve had noted, that was due to be initiated by June 2023.

EPA is required to develop, implement, and make publicly available a plan for tracking the adoption of the bilingual labeling, and that is due within two years or by December of 2024, and EPA shall also implement a plan to ensure that farmworkers have access to the bilingual labeling within three years or by December 2025.

So to address the PRIA 5 requirements for seeking stakeholder input on ways to make bilingual labeling accessible to farmworkers, that first deadline that was due this past June, we held a national webinar and then we also opened a public docket for public input.

So the agency posted questions in advance to solicit feedback on several topics, including communication approaches and strategies, technologies and connection issues, on the ground logistics, potential partners, and also how to implement these actions.

So for the national webinar, there were more than 380 participants that attended and we had 31 speakers provide feedback on how to make bilingual labeling accessible to farmworkers. This slide highlights some of the recommendations that we received. They touched on a variety of topics including the need for the agency to consult farmworkers directly. There were recommendations that this could be done through focus groups and partnerships with community associations.

We received suggestions to include pictures, graphics, or audio because the comprehension of farmworkers may be at a lower

education level. One commenter recommended that it could even be at a second grade level.

The importance of providing culturally relevant information was also discussed by several speakers. We received recommendations of locations where written materials, and/or an electronic link to those materials, such as a QR code, could be provided, and we also received a recommendation to provide information in a way that it could be viewed at home, so as not to cut into the time that workers could be working.

To potentially address issues with lack of internet or cell service, we received recommendations to preload information into mobile applications or potentially provide an offline option that can be downloaded.

Next slide.

The public docket for receiving written comments on accessibility was open from June 20th until August 21st. During that time, we received 36 comment submissions, including comments from Mayra and Mily's organizations, Farmworker Justice and Alianza Nacional de Campesinas.

In general, the recommendations we received in the public docket were similar to the

recommendations that we received during the national webinar. Some of the specific recommendations in the public docket comments included coordinating with various stakeholders on an accessibility plan and its implementation; developing a plan that can be effective without internet access, possibly by having printed labels available or by using an application with downloadable labels; communicate the availability of labels so that workers know they are available, and some of the specific suggestions for that included having an education and outreach campaign or doing -- sharing information through social media or posters or potentially radio announcements in Spanish.

We also had recommendations to provide support for workers so they can understand the labels, and some of the recommendations for that were possibly having a hotline available for them to call or developing a video.

There were also recommendations for electronic access of labels and commenters asked EPA to consider small file sizes that are phone and small-screen friendly. Also, consider the ability to be able to toggle between the English and Spanish label translations, and then, also, a recommendation

to provide labels on a bilingual version of PPLS.

In addition to comments on making labels accessible to farmworkers, we also received recommendations on other topics, including feedback on translations that are in the Spanish Translation Guide. Those recommendations are also being considered by the agency.

Next slide, please.

So OPP has been actively engaging stakeholders, one, to explain the PRIA 5 requirements, also to get feedback on accomplishing them, and then we've also have been sharing updates on our activities. Some of our outreach has included presenting bilingual labeling charge questions regarding farmworker accessibility to the National Environmental Justice Advisory Council last March.

We have been participating in quarterly farmworker advocacy stakeholder calls. We have participated in meetings with industry representatives, such as the CLA RISE Regulatory Conference last April and also a call with the PRIA Coalition and industry representatives in September. We've participated in meetings with SFIREG, AAPCO, and PPDC.

Last July, we participated in a call with state lead agencies and also in a virtual workshop for state lead agencies and industry representatives. That was with the PRIA Coalition and the National Association of State Departments of Agriculture.

We have participated in calls internally at EPA with our OCSPP and OECA regional staff. We met with the Tribal Pesticide Program Council's Executive Committee and, just last week, we also participated in a meeting with the U.S., Mexico, Canada Technical Working Group on Pesticides.

I also want to highlight a couple of our upcoming activities. We have four focus groups scheduled to be held with farmworkers in Region IX in the coming months, and we look forward to receiving that feedback on how to make pesticide labeling accessible to farmworkers.

Next slide.

In addition to the feedback that we received on our accessibility requirement of PRIA 5, we've also received feedback on other aspects of the new PRIA 5 requirements during our various outreach efforts that I touched on in the last slide. In general, we have received a lot of comments in

support of the bilingual labeling requirements, and that's from various stakeholders.

We have also heard concerns, though, about some of the new requirements. We have heard concerns about how the PRIA 5 requirements will be implemented from states and also from farmworker advocacy groups. We have also heard concerns about enforcement from those same groups. We have heard concerns about the resources that may be needed to comply with the PRIA 5 requirements from states, and we have also heard concerns about the Spanish Translation Guide from industry, specifically that some of the translations may be out-of-date and need to be updated.

So we are keeping all this feedback in mind as we are working through the PRIA 5 requirements.

Next slide.

As far as next steps, there is a Spanish Labeling Workgroup in EPA's Office of Pesticide Programs with approximately 20 members from across the various divisions in OPP. The workgroup is now heavily involved in the work to comply with the PRIA 5 bilingual labeling requirements.

We recently divided ourselves into

subgroups to work on the various PRIA 5 requirements. So we have an accessibility subgroup that is working through the public feedback from the webinar and from our public docket. We have a communication subgroup developing text for a website, and this will also include a section of frequently asked questions that we have received during our various outreach efforts.

We have a tracking subgroup that is currently investigating our internal systems and processes to develop a plan for tracking the labels with Spanish translations. We have a Spanish Translation Guide subgroup working through the comments we received on the Translation Guide.

So we are pulling a lot of information together now and we plan to continue engaging with states and all of the other stakeholders as we proceed.

That is the end of my slides. I will pass it to Aidan.

AIDAN BLACK: Thank you, Sue. Hello, everyone. I am Aidan Black, also with the Pesticide Reevaluation Division. I am in the Certification and Worker Protection Branch.

All right. So here's a brief overview of

the updates I will be going over, starting with certification of pesticide applicators; then PRIA 5 environmental justice-related grants; the implementation of PPDC recommendations from the farmworker and clinician training workgroup; and, lastly, an AEZ rulemaking update.

So there's a lot of content in these slides. I may not cover all the details, but the slides will be shared with links included afterwards.

So as Ed mentioned yesterday, a huge accomplishment this year was the approval of the certification plans. All 50 states, the District of Columbia, five territories, six federal agencies, five tribes, and the EPA plan for Indian Country were approved before the November 4th deadline. That is 67 plans in total.

The approval process took over three years and was a major effort by OPP and EPA's regional offices to work with these regulatory agencies and ensure that each plan met the federal standards.

The approved certification plans -- oh, I'm sorry. I skipped over the map. There we go. There is a nice visual of it all.

So the approved certification plans will

provide greater protection for the environment and human health.

For a little background on the certification of pesticide applicators rule, it sets the standards for the use of restricted use pesticides, or RUPs. Because RUPs have the potential to cause adverse effects, they can only be used by or under the supervision of a certified applicator. Each certification program now has an EPA approved plan that is in line with the 2017 certification of pesticide applicators rule.

More detail on the certification rule, in general, it sets standards for pesticide applicators to become certified in the use of RUPs, and the 2017 rule specifically enhanced competency requirements. It added new specialized categories. It established a national -- nationwide minimum age for pesticide applicators. It enhanced noncertified applicator qualifications, which are now more in line with the WPS handler training requirements, and it also restricted recertification periods to a maximum of five years.

Our role includes rulemaking and approval of plans, as well as the support of the certification programs. This comes in the form of

assisting state lead agencies in submitting annual reports, as well as funding the pesticide safety education programs, or PSEPs, through cooperative agreements.

Now that the certification programs have approved plans, we will focus on supporting implementation. Each plan has its own implementation schedule. OPP supports implementation through its cooperative agreements, including the Pesticide Education Resources Collaborative, or PERC, which develops manuals for specific certification categories, as well as the funding for state PSEPs that I mentioned earlier.

So now, I will go over some of the updates for the PRIA 5 environmental justice-related grants. I just want to mention up-front that these are not all the set-asides in PRIA 5. For this section of the presentation, I'll be focusing on set-asides that support farmworker communities, which is inherently environmental justice work.

So as Steve discussed earlier, PRIA 5 set aside funding for EJ-related grants. The set-asides for farmworker training and healthcare provider training replace the previous set-aside that was called worker protection activities. Under PRIA 4,

the worker protection set-aside covered farmworker training, healthcare provider training, as well as resource development for certification and worker protection. The new set-asides provide more details on the scope, eligibility, and worker protection activities that will be funded.

There's also an increase in funding for these agreements and technical assistance is also provided as its own set-aside.

The Pesticide Incident Surveillance Program has previously been supported by EPA, but it is a new set-aside as well in PRIA 5. The set-asides for partnership grants and PSEPs are extensions from PRIA 4. The funding amounts listed here may be supplemented by additional appropriations.

We have made some really good progress for each of these awards. We completed the administrative procedures to set up listings for the new set-asides. We are now in the stakeholder engagement phase for the first two set-asides listed here and highlighted in yellow. The farmworker training education grants, we are developing the request for information, or RFI, that will solicit input on our proposed program design, which we aim

to publish in early 2024.

We have already published an RFI for the healthcare provider agreement, and the comment period for that RFI will be open for one more week. I'll have more information on both of those agreements in some later slides as well and how that incorporates the PPDC recommendations from 2021.

Moving onto the SENSOR pesticides interagency agreement, that is already in place with CDC/NIOSH. Currently, EPA funds are supporting the Incident Surveillance Program in Washington, Texas, North Carolina, and Georgia.

We are currently processing a new award for the National Pesticide information Center, or NPIC. The current agreement expires in February 2024 and we do not anticipate a gap in services.

Lastly, the new PSEP agreement was awarded this fall, which we will discuss more on the next slide.

The PSEP agreement is key for supporting the nation's certification programs, consists of subawards to PSEPs at land grant universities. The first year of the new agreement is funded at $1.5 million. PRIA 5 only provides $500,000 a year. So EPA is supplementing with an additional $1 million

for the first year. There is also a higher award ceiling than for the past agreement.

We also see this agreement as an opportunity to support environmental justice work and design new PSEP agreement to promote collaborations with minority-serving institutions.

No, I'm going to go over OPP's work to implement the recommendation from the PPDC Farmworker and Clinician Training Workgroup. A little background, in 2021, this workgroup was charged with providing EPA recommendations on how to address reporting requirements for PRIA set-asides focused on farmworker protection activities. The workgroup provided EPA with two sets of very helpful recommendations in October of 2021, including 15 farmworker training recommendations and nine clinician training recommendations.

So here is a summary of the farmworker clinician -- or farmworker training recommendations. The new PRIA 5 set-asides provide a great opportunity to implement these recommendations with the farmworker training education grants. As I mentioned earlier, we are currently designing a new program which incorporates the PPDC's feedback and there is a link here to the full list of the

recommendations as well.

Specifically, the new program will focus on supporting community-based efforts to ensure that farmworker training works within the cultural context of the many unique farmworker communities across the country. Again, we plan to publish an RFI in early 2024 to get feedback on the proposed program design.

Here is a list of the clinician training recommendations. I'll click through these. The link is also provided for the full list. These recommendations have been incorporated into the proposed program design and in the RFI that I mentioned earlier. To publish that RFI in September for public comment on our proposed healthcare provider training design. The proposed design build on the work of past agreements includes new objectives to ensure that the program has both national reach and local applicability through collaboration with community-based organizations. There is also an increased emphasis on reporting of pesticide-related illness.

The comment period is open for one more week. The link to the docket is provided in the slide, which will be shared afterwards. Feedback

collected from the RFI will be used to inform a notice of funding opportunity for this program.

I just want to go over other ways that we are -- EPA's existing corporate agreements are also implementing the PPDC worker recommendations. So the Pesticide Education Resources Collaborative, or PERC, develops resources that support EPA's implementation of both the certification of pesticide applicators and worker protection standard. PERC has funded subawards for agricultural community-based projects, or AgCBPs. There are currently six AgCBPs that have been awarded at a total of over $540,000 in funds.

These AgCBP recipients include Campesinos Sin Fronteras in Arizona, Toxic Free North Carolina, Farmworker Association of Florida, Ag Health and Safety Alliance, National Center for Farmworker Health and Surry Medical Ministries.

PERC has also put out a request for applications for the next round of AgCBPs. Applications are due on February 1st, 2024, and PERC anticipates funding the next round by August of 2024.

In addition to PERC, OPP has other agreements that support worker protection

activities. The Association of Farmworker Opportunity Programs, or AFOP, administers the current National Farmworker Training Program. I mentioned NPIC earlier as there will be a new agreement in the near future through the PRIA 5 set-asides. The existing agreement will be in place until February 2024 and that provides science-based information about pesticides for the general public. Lastly, PERC-Med was the previous healthcare provider training agreement recipient, which concluded their agreement in August of this year.

I have a quick update on the AEZ rulemaking. EPA published a proposed rule reconsidering the AEZ provisions of the worker protection standard, that a 2020 rulemaking sought to amend. Because of a court order stay on the 2020 AEZ rule, the 2015 WPS requirement has remained in effect.

The proposed rule seeks to reinstate the AEZ's applicability beyond the boundaries of the agricultural establishment and within easements. It also proposed to reestablish the AEZ distances for ground-based spray applications.

There are two provisions from the 2020 rule that EPA proposed to retain. First is the

clarification that suspended applications can resume after people leave the AEZ and second is an immediate family exemption that allows farm owners and immediate family to remain inside enclosed structures during applications or the houses in the AEZ.

The 60-day comment period on the proposed rule closed on May 12th. We received 25 unique comments from a variety of stakeholders. We have reviewed those comments and the final rule is under development. We anticipate publication of a final rule in late spring 2024. There is a link for periodic updates on the AEZ as well.

Mike, I'll hand over to you.

MIKE GOODIS: Very good, Aidan. Thank you. Now, we have set aside some time for Mily and Mayra to share their perspectives as well. I will let you decide who is going first.

MILY TREVINO-SAUCEDA: Thank you. Mily Trevino-Sauceda with Alianza Nacional de Campesinas, and I forgot to translate it before, the National Alliance of Farmworker Women.

I was very happy to know that you included in the presentation a lot of the recommendations that we -- some of our organizations sent, which is

very good. And I want to read some information that will be also helpful and maybe some of it -- because I hadn't seen it before -- some of it might be repetitive, but I want everybody to -- it's not that long based on the amount of time I usually take.

But I'm going to talk about -- you know, it's -- specifically, I'm going to start with the bilingual pesticide labels. And what I had said from yesterday, it's very -- for us, it's very important that anything that is geared to a target population, in this case, if it's farmworkers, that's who we are talking about. That farmworkers be involved in the review of whatever material, in this case, labels; in this case, also interpretation.

We use the term more "interpretation" than just translation because it's very different how you translate information. If it's not interpreted the way it's culturally specific, it will not make sense to that community.

So in terms of language barriers -- I'm just going to read. Farmworkers in the U.S. are made up of workers from different cultural and ethnic backgrounds with varying levels of education and literacy. And I also mentioned that yesterday.

And some people are saying the same.

We can have farmworkers that have done or even have a career that come from other countries and -- but their way of means or trying to find how to sustain themselves, they end up doing agricultural work and that means that they have better literacy and education than -- but the majority of farmworkers are people that are coming from communities that there is not that much education for them or opportunities because of their economic situation or just the place where they're coming from.

Many of them are also -- we have found even in the studies that NAS has done, that 60 some percent -- more or less 60 or 62 percent of farmworkers have been found speaking the Spanish language, which means that the other 38 percent, more or less, might speak indigenous or some -- we still have -- we do have a lot of Haitian workers that, of course, know some English, but also do not know Spanish or English. They might know how to communicate it, but not read it. And I'm talking about Florida.

The national alliance that I represent is in 20 different states, and we cover the largest

states that -- where there is more agricultural, like California, Arizona, Florida, Upstate New York, Indiana, and some of the -- well, there are 20 states, but I wanted to mention some of those.

This is where we find more workers that are indigenous. There's a lot of indigenous communities, not just Oaxacan, which talk Mixtec, or other languages. There are actually 60 some languages in Mexico, just so you can have an idea.

And more and more people from Central America are coming and are here, and we call them domestic workers, domestic farmworkers. For the same reason, this is why it is so crucial to provide information in additional languages and methods, not just English and Spanish, to be more responsive to the workers.

There is some recommendations that we want to say -- well, additional recommendations. It was mentioned in terms of the graphics, and I know that other presentations have been very clear, and I think very understanding and more knowledgeable about how important it is to use graphics or pictures.

If you are going to use the digital, make sure that that would allow for the label to be read

in different languages, and that is what we heard from yesterday and there was some recommendations in terms of how important it is to have focus groups, have -- not just to hear from them from the beginning, but to show part of the draft that is being put together and have another -- this is how we do it and this is why we are effective, because we have a focus group with a certain group, and then we prepare the material and then we shall again with that same group and then they give feedback and then the final draft is also shown to them, and they also either give last recommendations or an agreement and that has helped us make sure that we are doing and being responsive with our communities.

Then something very important -- well, all is important, but this -- because we know that there is a lot of language barriers, one of the major issues is that a lot more times, workers are trained by supervisors or crew leaders or foreman, forewomen that might have some knowledge about how to apply chemicals and give that information just, you know, without proper instructions and then workers just follow. If they start asking questions, they end up being threatened in different ways.

A lot more times, because many of them are

undocumented, who are the first to know that they are undocumented is the crew leader, the one that supervises them directly because they know where they live -- where workers live, their families, et cetera, and it's much harder for workers to even complain, and they just follow whatever direction they are given and that creates a lot more issues with the worker.

Many more times, the -- when a worker asks, you know, because there is the smell of the pesticide or there is dust and people are afraid because of other incidents that have happened or fatalities have happened, the crew leader will come back and say, well, it's only medicine for the plant. And anybody that hears it's medicine for the plant, they're going to think that it's not dangerous, it's not poisonous because it is to "cure" the plant, which we all know that pesticides are dangerous and it has different levels.

So there is -- as I was saying yesterday, it's very different when we talk about how we want things to be done and written and put together and send it out there with workers or with the companies. When you start implementing it or workers start using whatever they're given, it's a

very different scenario. It's not the same thing. So work focus groups should be considered in terms of not just hearing from people, but seeing if that's out there, if it's going to work.

So the other part that I wanted to talk about and maybe also give as a recommendation -- and part of it was already in there -- let me see. I'm surprised in a very good way that there will be four focus groups in Region IX, which is where -- in California. It covers California. So we didn't know about that. On this right now, I'm hearing.

And I'm also glad that two of our -- which we already knew, two of our member organizations are also getting grants. They were able to qualify for that and that's great. I know that they are doing great work. So I would call it like pilot testing, whatever you're going to provide, and pilot testing is not the same as you just do the focus groups and then you have everything prepared and then throw it out there. It's also, see if it is going to work for them, because the majority of the time, we end up getting information that -- as I'm going to repeat again, that we think in this room or maybe within EPA or federal agencies, that it's -- it looks great, it's very -- it makes sense to us, but

the majority of the time, it might not make sense in -- with our target populations.

I think -- well, there's a lot more, but I'm going to give Mayra -- because I usually take a lot more information or say more than what I need.

MAYRA REITER: Thank you, Mily. We appreciate EPA's efforts to collect input from stakeholders and implementation of bilingual labeling because as the labeling is implemented, it's going to be important, not just that farmworkers know about its availability, but also that we ensure that they have physical access to that information, which is why you may have noticed that the recommendations that farmworker groups have made fall into two different categories. One of them is increasing awareness and the other is to ensure the physical access to that information.

There are farmworkers out there that handle pesticides without having proper training. They need to be aware of the hazards that those chemicals pose. So this isn't just important for the handlers. We need to remember that other farmworkers are exposed in various ways when they are in the field. They are exposed in their home sometimes through pesticide drift. There are many

different routes of exposure for them. And they also need to know about the health risks they face and they need to know about what they are being exposed to.

Since the conditions in every workplace are different, it is going to be important that there are various means of conveying that information, and Mily already referred to those. Also, there are different formats that is linguistically and culturally appropriate. We are hoping that in preparing this information to be released and any materials and tools that EPA develops, that there will be consultations with farmworker groups throughout the process, and I have to say the EPA so far has been a very good job of seeking feedback from groups. We are hopeful that that will continue throughout the process of implementing the bilingual labels.

So once again, I would like to thank EPA for the efforts that they have been making in this area and we look forward to collaborating as the bilingual labeling is implemented.

Thank you.

MILY TREVINO-SAUCEDA: I promise I will be short. I will say this, and with all due respect,

but the majority of the time that we are talking about issues and how come farmworkers do not complain, how come farmworkers are having all these issues, and many more times its representatives that are speaking on their behalf. It has to do with all the kinds of retaliations to start with. And I hate to say it, but I have to say it. This is a country that is still very racist and it has still allowed for agricultural workers, not being part of the Fair Labor Standards Act, not part of the industrial relations.

We were exempt from being part of the protections and that has allowed for many unscrupulous growers, ranchers, that the only thing they care about is either hiring labor contractors or hiring other people that will take care of their business as long as they get their profits, and that has created another means of slavery, modern slavery.

It's -- for us, it's something that -- we are always thinking, why do we have to be living in 2023 under no protections? The majority of the states do not provide any protections, much less health insurance; much less -- you know, if someone gets injured on the job, it's the choice of the

company if they want to provide the worker compensation, et cetera, et cetera, et cetera.

There's a lot of marginalization, there's a lot of exploitation, and there is a lot of abuse, and it's very open for that. I say it because I lived it. My family lived it. We have relatives that have lived it. We were migrants. Some of us were born in the State of Washington, others in Idaho, and others in Mexico, and then we ended up in California. We went through so much and we still see this happening. And it's so -- for me, it is so ironic that this is a country that has a lot to be very proud of, but I don't think we should be proud of how some workers, especially farmworkers, are treated with no dignity and no respect. And that's very shameful. Very, very shameful.

I'm glad that EPA is putting a lot of effort and, hopefully, they will continue listening to what we are trying to say here. Please make sure that farmworkers are sitting at the table when any information is going to be put together, materials, anything, labels, anything, so they can give feedback. Not just certain workers, several workers. You're going to get the best feedback.

We do that and we are effective because we

do that. We engage people. Because we lead -- we believe that everybody is -- if people do not have -- have had the opportunity to go to school, people are smart. I didn't have any high school before. I did not have any high school because I was a migrant. The same thing with my siblings. Not until I was an adult. But I was able to decide on that. I went back and learned I was very smart, and I start -- and I learned that from many of the people that we are working with. Not having these kind of opportunities of being educated or having a career doesn't mean that you're not smart.

We are. And we have the experience from where we live and the kind of work we do and we can guide you with that.

Thank you.

JEFFREY CHANG: Thank you for that.

We can move on to discussion, starting with Joe. Name and affiliation, please.

JOE GRZYWACZ: I don't have a question, but as a representative of a university -- Joe Grzywacz, San Jose University -- I want to do my best to try to make as concrete as possible some of the things that Mily just said.

I will use a simple word, run. Three

letters. I have a run in my stocking, he hit a home run, I'm going to go for a run, will you run that program. That three letter word, R-U-N, means something different in each of those five sentences. So the notion of being able to translate a complex concept like the AEZ, the designated representative, the central posting area, all those things mean stuff to people in the room.

But, A, it does not have a direct translation. B, even if there was a direct translation, language is symbolic. I have been saying this now for two days. Language is symbolic and the only way to understand that symbolism is to make sure that there is a shared understanding of that.

So part of what Mily and Mayra are saying, to kind of help convey this notion of it's not just translation. It's being able to recognize that without the ability to formulate a thought around that thing because the translation is less than imperfect, it makes it exceedingly difficult to understand and implement the very things that are in the worker protection standard training. All right?

So that's the first thing I want to point out is remember that. Run, a simple word that we

all use every day. It only has meaning when you put it in a sentence and then you can start wrapping things around that. That is why translation is so hard and that is why it is so complex to convey these huge ideas like the AEZ, like the centralized posting area.

Point number two, remember that the things that you all take for granted every single day, like you go home, you give your kids a hug, farmworkers can't do that. They are supposed to take a shower first. Otherwise, there is a para-occupational exposure from the residue that are on the plants, that are on their clothes, that are on their hair, that are on their skin, and all the other kinds of things. You all take that for granted. Every day, I get to come home and give my kids a hug. But, yet, we advocate and we expect farmworkers to follow our rules, of course, for their best interest. But, yet, they can't give their kids a hug when they get home.

That is the concrete meaning of some of the ways that the wonderful procedures and the things that are in place, hard-fought battles of the worker protection standard to get where we are today. That's the boots-on-the-ground work in terms

of how it actually operates. And it's important to recognize that complexity and I applaud EPA for the great work. I mean, quite honestly, I was afraid at the end of 2022 or whatever when the farmworker and clinicians group gave their recommendations, I was, oh, you guys are just going to -- you're just going to table those. So kudos to you guys for making sure that you push those important ideas forward.

But I also want people to recognize the gravity of how hard this work is. And so, therefore, to see to it that when we are hearing these discussions about translation, well, that shouldn't be a big deal, we've got artificial intelligence to do that for us. Um, yeah, no. all right?

So I would encourage to, in whatever ways that you can, it's a resource-stretched institution, but I would really encourage that if there's any ways of trying to leverage more resources into that particular space, that is where you are going to see the impact. And I'll stop preaching.

JEFFREY CHANG: Becca?

BECCA BERKEY: Thank you for this reporting. And I -- yeah, I would agree with so much of what has been said. I am Becca Berkey. I'm

at Northeastern University in Boston, Massachusetts, and also part of the Farmworker Health Injustice Team through Coming Clean. I'm going to make some of these comments with my kind of academic hat on from the perspective of being an environmental sociologist.

I think one of the things that I kind of want to punctuate from what has been shared -- and, I think it's in some of the slides and some of the reporting, but would love to like bring it out more when we're hearing I think some of the work that's being done, is really around the intersectionality of the marginality, the farmworkers' experience because that is really what, in addition, to the just very direct fact that they are working in fields that are being sprayed with pesticides, it is also their race and identity, their citizenship status, their gender or sex, their socioeconomic status and so much more than that that compounds that vulnerability.

It also makes tracking and reporting, which is obviously a priority, I think, within what was just kind of shared with us, it makes it very complex to do. Right? So thinking about that, you know, I think just to build off of the

recommendations that I think Mily and Mayra were sharing, I think, first and specifically around focus groups -- you know, I've only been part of this group -- this is my third meeting, and I think that it's clear to me as I look through EPA reports and even hear the presentations here, that there is a value on kind of positivist or post-positivist research. Right? This like numbers are everything.

And as we think about things like focus groups and some of the best practices around that -- and this may already be here and I'm just not hearing about it, but I would love to hear more about the approach to other forms of research that are valid, thinking about things like community-based participatory research, constructivist research, and other kind of emergent research methodologies that allow for the iteration that I think Mily was just speaking to of actually responding and then coming back and really thinking about what the associated methods are with those.

And, again, I think that might be happening, but as a person who does mostly qualitative research, I think I don't know how the focus groups or the webinars or the different data collected from that are going to be analyzed and

turned into these themes and I'd be interested to hear more about that.

And then thinking about the goal of meaningful involvement, I think one thing that comes to mind for me, particularly as you're thinking about kind of pilot testing some of the different solutions that are put out there, is really involving people with expertise in user interface, user experience design and research, and it feels like that will be pretty crucial probably and in kind of making sure that process is iterative and responses are being made to the sorts of feedback that are being given period and then things are being retested and repiloted until it's right, or as right as it can get, and that it can evolve and be nimble over time.

And then, obviously -- and I think this goes without saying, but I think I just want to lift up that all of that should be done in collaboration with organizations like Mily's and Mayra's to make sure that the people who have the trust of farmworkers and people in the fields -- and I commend you all for doing that so well so far, but continuing that work to make sure that those voices are at the table and that that work is continued,

expanded, and continually incorporated into the work that is being done in this area. So thank you.

JEFFREY CHANG: Jim Fredericks?

JIM FREDERICKS: Hi, everyone, Jim Fredericks with the National Pest Management Association. Sorry I missed yesterday's -- the first day of the meeting. I'm really glad to be here with everybody together and really enjoyed the dialogue, the conversations that are happening.

Our organization represents 20,000 small and large businesses across the United States that have close to 150,000 pesticide applicators who are visiting homes and businesses every day. So I get the -- definitely concerns about label interpretation because often the English label interpretation is often up for debate among our folks and we are always trying to figure out what does that English mean and the vast majority of our workers are English speakers.

As our industry grows, we are becoming more and more diverse, and we have more and more people who English is not necessarily their first language. And although the vast majority are probably English speakers, that doesn't necessarily

mean that they are confident in their English reading. They certainly are often feeling like they would be more comfortable to see these labels in their native languages. So I applaud the effort. I think this is really great and look forward to seeing that.

And we certainly recognize that there are all kinds of issues and certainly this idea of interpretation and some languages being symbolic. I think about -- I'm sitting here thinking about the jargon even within our industry that we see on labels, like a space treatment. I don't know if that translates well. Or a crack and crevice treatment, I don't know if that translates well. And so I certainly would encourage the OPP to engage with stakeholders as part of that process to make sure that in Spanish -- the Translation Guide is kind of well thought out before that first version.

My question, I guess, would be for OPP is -- and think this is a simple question, would the Spanish Translation Guide, would that go through like the normal comment system, you know, comment period? Would that have an opportunity for public comment because that would be a great opportunity, you know, for industry at large and, you know, for

stakeholders at large to provide feedback as well.

UNIDENTIFIED FEMALE: So the Translation Guide is currently available on EPA's website. The first version is already out there. As far as public comment on revisions, I think there has been some discussion about if there are terms or phrases that are up for debate or that there are -- it's not clear cut that maybe we would want to get some feedback on that, others that are maybe more straightforward, perhaps not. But it's still something that we are discussing.

JEFFREY CHANG: Nathan?

NATHAN DONLEY: Thanks, Nathan Donley, Center for Biologic Diversity. Well, first, I want to thank Mily and Mayra for giving their perspective here today because it's so important that we are all reminded of this often, and I appreciate you telling your stories here, for sure.

I want to acknowledge some of the environmental justice progress that this office has made in the last few years. There have been issues that farmworkers in at-risk communities have brought to the attention of the agency that you're finally getting around to doing, and that is really good to see and I know there's a lot of work that wasn't

necessarily presented on here today, and I want to acknowledge that.

But I also want to talk a little bit about the registration process because I think a lot of the progress you are making in other areas can sometimes be undercut by what is going on in registration.

I want to talk about the organophosphate registration review because it's going on right now and I think it is relevant for this environmental justice conversation we are having. You know, right now, EPA has decided to use NAMs, or new approach methodologies, kind of like in vitro experiments that are being developed now to supplant animal experiments and studies. EPA is using NAMs as pretty much a sole line of evidence in deciding not to regulate organophosphates as a class when it comes to concerns about developmental neurotoxicity.

We are starting to see the implications of that decision now, most recently, in the acephate review -- it's a very widely used organophosphate, especially in agriculture -- where EPA has decided to get rid of child protections for acephate, which again is, again, organophosphates, one of the neurotoxic classes of chemicals known.

And there is just a rich amount of epidemiology on organophosphates in general being associated with pretty severe neurodevelopmental outcomes, as well as acephate specifically, the Chemico (phonetic) study, for instance, multiple different outcomes with this cohort, which by the way was designed specifically to look at associative harm to those most vulnerable from pesticide exposure, the most at-risk populations. And all of this epidemiology was discounted in favor of NAMs, the in vitro studies.

You know, the acephate analysis was billed as a weight of evidence approach, which is great, but in my opinion it really wasn't a true weight of evidence approach. You know, it was an approach that unjustifiably prioritized one line of evidence over another and it was an approach that recognized limitations in epidemiology, while at the same time not recognizing the even greater limitations of using a few in vitro NAM studies to try and model what is going on in one of the most complex, intricate nervous systems in the animal kingdom.

The neurodevelopmental harm associated with organophosphates are things like learning disabilities and behavioral problems and reduced IQ

points and to think we can get any reliable information from that from, you know, I mean, a clump of cells in a freaking petri dish, I mean, that's a fairytale right there. And I understand the pressure and the excitement around NAMs to start using these right away, but they are just not ready when we're talking about chronic health effects, especially when the epidemiology is telling you the exact opposite.

So, you know, to use NAMs specifically to get rid of protections, that's dangerous, and that's just not -- that's just not my opinion, that is the opinion of the Children's Health Protection Advisory Committee that EPA consulted on its work here and the 2020 FIFRA SAP. Both of them said you cannot use NAMs to justify getting rid of protections. Those data cannot not be used in that way.

So, you know, I just want to say -- you know, tout your environmental justice success because there have been some. But, in my opinion, the agency is creating a brand new environmental justice problem as we speak in the organophosphate registration review by getting rid of these protections.

So the fact that we are in 2023 parsing

about organic phosphates is just -- you know, it's terrible. More than 20 years after the passage of the Food Quality Protection Act, which was designed, by the way, to protect kinds from -- from above all else organophosphates and carbonates.

So I urge the agency to really just think long and hard about what it is doing and how it is using these NAMs because if it's wrong -- and I think history will show that it is -- you know, that the agency is, it's farmworkers and it's young kids who are going to be having the impacts here. I've worked in this area for about eight years now and I keep seeing the conservatism in the risk assessment process kind of slowly being clawed away.

You know, it's not uncommon to read a response to comments that says, you know, we found some slight LOC exceedances for farmworkers, but, you know, our registration process is so conservative that we don't think this is very likely. And a little part of me dies every time I read that because that conservatism exists for a reason.

It doesn't exist just to be explained away. It exists to protect people like that six-month-old that is crawling around on the floor and

getting a bunch of pesticide-laden dust on their hands and then shoving that fist into their mouth and sucking on it for like 20 minutes. Kids do that stuff. And the farmworker, who's got more organophosphates in their blood than 99.9 percent of the rest of the country, you know, these are the people that conservatism is meant to protect, and I keep seeing excuses to get rid of that conservatism as if it is somehow not needed.

So I just urge the agency to view conservatism in risk assessment as an asset and not a detriment, not something that needs to be addressed or refined away. That is all.

Thanks.

JEFFREY CHANG: The last three comments, Anastasia?

ANASTASIA SWEARINGEN: Thanks. I will try to be really brief. So I want to take us back to labeling a little bit and I think it is really helpful to hear the perspective from those who don't necessarily have access to the label and so it's interesting to hear what Spanish and other types of interpretation would be needed to understand what is on the label, especially when you are not seeing the label itself. I think it's really interesting as we

think about the environmental justice and the bilingual labeling to think about how do you convey things outside of the traditional labeling concept.

We talked about the labeling group yesterday, and I think we have heard a lot in that discussion about how difficult it is to align on language when everybody has so much flexibility, there are so many different types of products. We've talked a lot about agricultural products today, but, obviously, there are any other pesticides.

So as we think about translating all of these into other languages and making them easy for people to understand in English and Spanish, you know, I really encourage those who have these considerations to think about working with the label workgroup on how we can make the English more effective, but also recognizing that we are very much kind of constrained by what's in the law, what's in the regulations, what's in the label review manual. So let's see, you know, can we work on some of those issues in that workgroup, too, to address some of these concerns.

JEFFREY CHANG: Mano?

MANOJIT BASU: Thank you. Manojit Basu,

CropLife America. Sorry I missed yesterday. I know that it was a great day and a lot of good topics. Thanks, Aidan, for the good overview on all the set-asides and programs and some of the funding that is being provided.

Just a quick comment, if it's possible for future PPDC meetings hearing exactly what those programs are and how they are making an impact on the ground would certainly be helpful.

Thank you.

JEFFREY CHANG: Thank you.

With that, we will break for lunch. It's 12:35 p.m. We are back at 1:30 p.m.

(Lunch break.)

OPEN DISCUSSION & MOVING FORWARD

ED MESSINA: Let the record reflect that everyone was on time, exactly at 1:30 p.m. It's 1:40 p.m.; we're convening. And we're going to do a little picture. If you want to be in it, great. If you don't, you can step to the side. Really I'll use it for a future PowerPoint, probably. That's where it's going. And we use it for our internal communication. So I think we are going to take it from that corner there and then just kind of look down this way.

While we are talking, because Michelle has to leave at 3:00 and so I want to get her in the picture and then thank her for her work here.

[Taking picture]

ED MESSINA: So our next session, Michelle is going to put up on the screen kind of a whiteboard, and really the purpose of this session is to give any PPDC members a chance to talk about anything they would like to talk about. We're going to have the agenda up here. And if there's any topics that folks want to revisit, that would be another appropriate comment. Also, if there are topics that you thought we should have talked about during this PPDC and didn't get a chance to talk about and maybe put it on the agenda for the May meeting, that would be something that we can talk about, and anything coming out of the workgroups or, you know, topics that folks think warrant a future workgroup would also be a part of the topics.

Anything else to cover?

(No response.)

Okay. So it's really, again, your discussion. Please put your tent cards up if you'd like to add anything about any topics that were on the agenda, not on the agenda, things that your

association is working on and the folks that you are representing here that you wanted the PPDC to be aware of.

So with that, it looks like we have our first card with Keith.

KEITH JONES: Keith Jones, BPIA. I want to thank my esteemed colleague, Joe, for encouraging me just to remind folks when we talk about resistance management, we would encourage the workgroup and EPA to really factor in the benefits of biopesticides specifically with regard to IPM and resistance management. I don't want to give the impression that they are a silver bullet, but we believe they are an important part of the solution. So I just wanted to get that on the record. Thanks, Joe.

ED MESSINA: Thank you, Keith. Mark?

MARC LAME: So usually I try to talk a lot after lunch, that way it keeps me awake. No, just in response, you know, fortunately, there are a number of new technologies that are relatively new technologies that are really going to help in this and we're going to try to cover that in our report. So please make sure when we do the report, you know, if we left out anything or whatever else, we would

add that in. But, I mean, there was stuff talked about today that wasn't even a part of a lot of what we were thinking many years ago on IPM, you know, with the degree day temperatures, charged particles, all kinds of things. So we want to make sure we get them all, so we will need your help to list them as far as the technologies that are available.

I think what is really important -- and I believe our partners with USDA, Cameron, are going to be -- you know, have already given a lot of thought to it is when it comes to some of those technologies, USDA is -- that's kind of their bailiwick, which is why we need to pay close attention on implementing some type of strategy that gets out of the stovepipe, because that's where, you know, folks naturally end up. I get it. But if we are going to be successful, we have to basically break down those barriers.

JEFFREY CHANG: Joe?

JOE GRZYWACZ: Only because it's fun, translate stovepipe so that everybody knows what that means, only to make the connection to make the point.

MARC LAME: And even having more fun at siloing.

ED MESSINA: I call them our impenetrable cylinders of excellence.

JOE GRZYWACZ: Way to put a positive spin on that.

ED MESSINA: We are just so good right here, we don't know what else is happening. We are like amazing right here.

MARC LAME: That's why Ed gets an A for political management.

UNIDENTIFIED MALE: [Microphone issue.]

JEFFREY CHANG: Turn on the mic, please.

UNIDENTIFIED MALE [Microphone issue.]

Is to be respectful of different kinds of knowledge. And what I mean by that is, Ed, after your opening comments, I went back and I read through Freya Kamel's paper on paraquat and Parkinson's disease, and then I went and read the other paper and I got the impression -- I'm sure it was not your intent, but I got the impression that it was sort of the second paper negated the first one. But the point is is that, yes, they both came from the agricultural health study, but they were working with different segments of the cohort, they were asking different questions, and they had different scientific designs.

And, admittedly, the second scientific design is a stronger scientific design, but it also was weaker in some ways because it had a much more precise endpoint than what Freya had because they were talking about incidence rather than prevalence, but it had the same crude indicator of exposure that Freya had. So it really demanded a lot from those particular data to actually find the same finding that Freya found back in 2007.

I use that not to penalize anything, because as comments have been made, there's lots of ways of interpreting science. But I get the sense that because our legacy is much more in the sort of basic bench sciences, that we tend to revert to that model of interpreting data. We are looking for the mechanism of action or looking for the lab study that we can situate certain elements in. So, therefore, when we see something like a NAM that's growing things in a petri dish, we love to think that science is going to help us understand this interactive multi-organismic kind of thing down the road in 10 or 15 years after all sorts of environmental exposures. But study can't inform that outcome. But, yet, we want to think that high-tech bench science is going to be able to answer the

question.

So I would really encourage us to be thinking more in terms of multi-science, in terms of how we make sense of the data, but then also how we implement that. One of the problems with the implementation of the subgrants to community-based organizations is that we are imposing a very linear process on these community-based organizations.

So for example, I'm helping the Farmworker Association of Florida implement one of their projects, and just as their project was getting started, Governor DeSantis decided to take aim at a group of people, and so that organization had to pivot all of their resources to respond to that farmworker community. But, now, their feet are being held to the fire about what about this promise to PERC on this project. There needs to be some flexibility in terms of how we are not only interpreting it, but then the way we expect others to operate in that environment.

I don't have a recommendation around that space, as much as just simply to illustrate how the two models don't necessarily go hand in hand, but there needs to be some flexibility, respect, recognition that, as somebody said the other day,

this might be our day job, but for other people, it's their night job or their second or third shift. So being able to have some understanding of that I think is warranted.

JEFFREY CHANG: Charlotte?

CHARLOTTE SANSON: Thanks. So one suggestion -- and I think what we heard a lot of here in the past couple of days was so much discussion on labels and label topics, right? So it seems -- you know, it's probably pretty obvious that there is so much overlap, right? There are some intersections between what's going on with the Label Reform Workgroup and incorporating endangered species statements. What we heard today about -- the discussion this morning on bilingual labels and the challenges with that was so informative. It really was helpful, the language that we use on labels, that sort of thing.

So I think just seeing some kind of matrix, maybe just having a discussion on the matrix of where everything overlaps and comes down to labels, I think a discussion on that would be helpful and whether it's here in PPDC or it's -- I certainly don't think we need another workgroup, but it's something that the Label Reform Workgroup

perhaps can take a look at as well.

We will never stop talking about labels and trying to improve and streamline the information on labels is going to be a constant effort. As registrants, I know we are committed to doing that, but more discussions -- keep the discussions going on that because it is a critically important component of what we do.

And then one suggestion, and I know I discussed this with Michelle earlier, I know that getting the presentation slides in advance is so helpful, so that we can come to the meeting informed and know what to expect other than -- you know, the agenda topics, we can kind of guess what is going to be discussed, but when we actually have the slides and then we can go back and look at them during somebody's presentation and say, oh, slide five, we would like more clarity or whatever and have some discussion, because it really does help for having a constructive and productive discussion.

And I'm sure what it comes down to is discipline for the presenters and the time that they have, or lack thereof, of getting their presentation slides done on time. So I appreciate the work that everybody puts into that, but it is very helpful to

have those ahead of time.

JEFFREY CHANG: Alexis?

ALEXIS TEMKIN: Thank you. Alexis Temkin, Environmental Working Group. I wanted to bring back the topic of new approach methodologies, and I think this is something that also came up at like a past PPDC meeting. I think there was even maybe this like maybe we want a workgroup on it, maybe not, but like before we knew how workgroups actually get performed and maybe the work that goes into them. But it did seem like there was a general interest in having it, I think, as a future topic of discussion.

And there probably are already internal workgroups at EPA working on NAMs and I know there's like a flurry of publications coming out on new approach methodologies from within the EPA's different divisions as well as National Toxicology Program and things like that.

But just to bring up, I think some general concerns on how those methods are being implemented in registration review and also potentially with the upcoming, you know, really like revamping and generation of data within the endocrine disruptor screening program and emphasizing just that for certain endpoints, I'm thinking, you know, really

complicated chronic endpoints, like endocrine disruption, like developmental neurotoxicity, immunotoxicity, thyroid toxicity, some of those really important chronic long-term health impacts, that those NAMs are not necessarily validated yet, but they shouldn't exonerate chemicals or be used as a way to sort of say this has no effect or no concerns.

So just, I think, a deeper conversation about them, and how they are being used in different parts of registrations would be really helpful and useful.

JEFFREY CHANG: Anastasia?

ANASTASIA SWEARINGEN: Thanks. I really appreciate all the discussion today and all the work that presenters did to put together these slides. I agree that having them in advance would be helpful, but as someone who helped do slides, I know that we are a little bit late sometimes. But we can certainly work on that and have them to you well in advance.

One thing that I know we have talked about and I have heard come up is EPA's approach to systematic review. It was a discussion in PRIA 5 and I know that there is ongoing work for an OPPT

framework on that. So maybe for a future topic for an update is maybe having where are we on that. If it is time to do that, it might not be at the May meeting, but maybe a future meeting, it would be good to kind of hear where they are and how it applies to pesticides.

One other thing, we heard a lot about kind of getting the end users involved, and I don't have a suggestion for what this might look like in a work stream, but we have a pretty good line into hearing from the farmworker communities and they are here. But I'm wondering how we kind of get some of the other pesticide user reviews. I think through the EPIC, we have had some outreach to some user communities that are outside the traditional agricultural use, but thinking about how in future meetings and honestly in the registration review process, we take the input from some of those other end users and -- I'm sorry, I don't have a good suggestion for how to do that, but just something that I think I will noodle on and maybe encourage others to think about how we kind of get those perspectives here.

JEFFREY CHANG: Walter?

WALTER ALARCON: Good afternoon. Buenas

tardes. My name is Walter Alarcon with NIOSH/CDC. I'm currently the Pesticides Program officer for the SENSOR Pesticides Program. And at this time, I would like to offer some comments about recent activities in the SENSOR Pesticides Program.

Through the Office of External Programs, NIOSH funds California, Illinois, and Michigan to conduct acute pesticide poison surveillance. And as discussed this morning, we have an IA, interagency agreement, between NIOSH and EPA, and the purpose of the IA is to expand the capacity of this SENSOR Pesticides Program. Specifically, these funds have increased the number of states receiving financial and technical support (inaudible) the SENSOR Pesticides Program, improving acute (inaudible) pesticide (inaudible) use or in its capacity with industry stakeholder partners.

Using these funds provided by the IA, NIOSH has awarded contracts to state health departments in North Carolina, Texas, and Washington State. And, we expect to receive data -- 2021 data within the coming weeks and we have recently worked with the Georgia Department of Health and we hope soon that we can (inaudible) SENSOR Pesticides Program so we can also work --

benefit from that data.

About two weeks ago, we conducted our annual SENSOR pesticides training workshop in Saint Augustine, Florida. We (inaudible) help of our colleagues in Florida, the Department of Health, who volunteered to organize this year's workshop, even though Florida does not receive fundings to conduct surveillance on pesticide poisonings.

I think the goal of this workshop is to improve our skills in coding cases of acute poisonings and learn from experience from our colleagues. This year, we have (inaudible) attending, the EPA, NIOSH and Canada, 24 persons attending in person and about 10 percent to 12 percent represented virtually.

I would just like to say that a key part of the workshop is the case (inaudible) exercise. This helps us to improve our data accuracy and to learn -- to help us learn from farmworkers. The Florida Department of Health asked Jeannie Economos -- we know her, right -- from the Farmworkers Association in Florida to come to talk with us. In order to help us learn from farmworkers directly, the Florida -- the Department of Health coordinated with Florida's Worker Safety Program, in Florida,

the Department of Agriculture and Consumer Services, and we were able to visit two sites in person and talk to the farmworkers so to learn from them.

I will now discuss some activities we're doing at this point. We plan to complete a review of the data on poisonings from state programs and then share this data with the EPA's Health Effects Division before the end of this year. The EPA's Health Effects Division will use this data to inform EPA's risk assessment processes.

Also, we are analyzing data on our work papers. We completed the analysis on acute poisonings related to mosquito control applications, acute pesticide poisonings among farmworkers, and if time allows, we plan to finish two other papers on, again, pesticide poisonings in retail industry and among adolescents.

Now, SENSOR is the sentinel (inaudible) for occupational risks on pesticides. Back in October 2021, we presented how we work, our (inaudible) and our (inaudible). So I would encourage our members to visit that page and review what we have done in the past. And if you have questions, we are always willing to share with you our -- what we do in the SENSOR Pesticides Program.

Our goal is to provide data to the EPA so they can inform policymaking and we can -- we work in NOISH to produce papers that can also support protection of workers.

Thank you.

JEFFREY CHANG: Anyone else or anyone online that wants to make a comment?

Mily?

MILY TREVINO-SAUCEDA: I was going to wait if someone online was going to talk.

Mily Trevino-Sauceda with Alianza Nacional de Campesinas, which is the National Farmwworker Women's Alliance. And I'm trying to put together why or how to explain -- I think Spanish first and then I translate it to English. So please bear with me.

Yesterday, I mentioned it was very important for us to continue having a farmworker working group. And I know we presented some charges, and I know based on the presentation, you have been following up. But there is also -- I feel that the farmworker working group needs a space to not only voice like I have been doing here, how Mayra has been doing and some companeros -- colleagues have been doing it, companeros. But it's

more about trying to understand how we can break gaps, help out in terms of breaking gaps of all the different things that I was mentioning, some of us have been mentioning.

It is a larger gap than we all think in terms of communication. And I will give an example. While I was working in the fields with my family and other coworkers, the only thing you're thinking about is how you are going to make sure you're going to do your work right and finish at a certain time and make sure that you're going to have enough earnings during the day, et cetera, et cetera. There's a long conversation about that.

But then when things started happening in terms of people getting hurt or -- because I personally -- you know, my family -- two of my brothers got injured on the job. They were minors. We had no idea where to go. That is just an example. When someone told us that there was this agency, Legal Services, that was there to provide services, not necessarily about what had happened to my siblings because that was in Idaho, and by then coming to California, there was more openness in terms of people wanting to ask questions.

I had no idea, even though we had learned

-- some of us have learned about our rights because California is the only state that has full protections right now. Not during the time I was doing farm work, but throughout the years, we now have full protections.

When we were introduced to the Legal Services agency, that is supposed to be doing assistance, providing assistance. Of course, later on, I learned about it because I started working with them, et cetera, and doing a great job whatsoever. But it's how, you know, people that come from other countries, even though some of us were born here in the United States, we were migrants, you know, we would go and come. Not everybody is undocumented. So we would come back. My mom never liked living in the United States because of the treatment.

When we ended up coming to California, it was cultural shock, completely, even though I had -- we had lived in Idaho and then coming -- going back to Mexico. And every time there was a cultural shock. And even, you know, you felt like you're not from one country or the other, because you are treated in a very different -- you're treated different.

Where I'm getting at is that every time we talk with farmworkers now or throughout the years -- like the gentleman, what is your name, Marc? You said, you know, your white hair -- I intentionally left my white hair, I didn't tone it anymore or anything like that, so I could remind myself how many years I've been involved. And how important it is for people to really understand, it's a long trajectory and I think every single one of us has experience and has our own history of why we are doing what we are doing and how everybody has its own stories.

For mine, it's not only a reflection of just me and my family, but a reflection of thousands of families. Because if you ask me about almost losing my son because I was working in the fields when I was pregnant and I almost lost my son. It's only me that understands what happens. Reproductive health is a very strong issue in terms of what is going on with women. They have to work. I had to work. There was no other way. I had to work to be able to sustain with my husband, because the pay was not high and we were lucky we were working under a union -- a union contract. You know, we started working there. And having some health benefits, et

cetera.

So in terms of how many women we have seen, you know, have had miscarriages and they don't relate it, and I didn't relate it -- to it being caused by pesticides, because the kind of work I was doing wasn't as heavy around that time. It was during March -- between February and March when I was having that issue. We were thinning the grapes, the grapevine bunches. Of course, it's a lot of walking whatsoever, et cetera. But in terms of seeing many women -- and what I'm saying, I'm not exaggerating, it's seeing many women losing their pregnancy and not them understanding why.

This is where I'm getting at in terms of where we have been. We are a population that is disconnected from everything. I don't know if it is intentional or what, but whomever knows, owners of companies, you know, there's acres and acres and acres. You are very far away when you're working from everything. This is why it is so easy to be abused and exploited and marginalized. It's very easy.

It's much worse for women because we have found that nine out of ten have been sexually harassed while they're working. It happened to me.

I will believe a woman that comes forward. It took me 15 years to even talk about it. It was hard. So there is a lot of taboos, there is a lot of myths, and there is a lot of lack of connection with agencies.

This has to do with, you know, even the naming of an agency, when you translate it, you call it agencia, which in other countries an agencia is like a travel agency or whatever, but it is not necessarily an institution or a government institution. It's got different terms, different ways, different culture, just different ways. It is very, very easy for workers. And I'm explaining all this and I think many of you have heard this before, but I'm going to continue saying it in terms of giving visibility to our issues is very important.

Giving visibility to who we are, because if we are not visible, we are ignored. Because whomever is not visible, whomever you don't see, you don't know, or if you see, you might not care. But for us, we do, we care for ourselves. We had to decide to take care of ourselves.

We are not here to create enemies whatsoever. We are here to try to see in what way we can be heard because we are so used to hearing

others telling us what they think is so important. We want to respect that, but we don't feel we have a space. And it's not easy when you don't have -- you don't feel you have space.

I'm not saying it just because I'm asking for a farmworker working group. Maybe I am. But it's more of how important it is for everything that is being said, and if -- because it is targeted to farmworkers, it's for -- this is why I'm here. You know, I could be doing many other things, like all of you could be doing many other things, but I chose to do this because I feel that this is an important space to be visible, to talk, and I'm getting the sense that a lot of you have a good idea of who we are and why we are here and why there needs to be more of a reform.

And when I said the Fair Labor Standards Act, I understand that, and I will always say and will always repeat this country has been very racist because I really mean it. It was very intentional for agricultural workers to be excluded because how many years back slavery stopped. It was "banned." For how dare black people were going to be having the same kind of protections than any other industry, how dare. That was the thinking and there

is still that thinking.

Latinos have inherited our culture more now and we have that burden, and I think -- I'm not sure if it would be much easier and I hope it would be much easier for workers to feel that they are a part and that they have protections. If they feel that they have protections, they are going to say something. In California, there's more workers than we have seen that are willing to step up than many other states, and we're in 20 states.

It's very hard. Maybe not everybody agrees and everybody has their own way of thinking, that's fine. But I'm here to talk about who I am and who I represent and why. It's about having that space.

I'm going to go back in terms of we still need to have a farmworker working group to be either monitoring or giving advice or making sure because we haven't had this at all space. In 2013, it was the first time ever, the first time ever that United States Department of Agriculture invites a farmworker or agricultural group to come to their building. The first time ever, it was our organization. Even Secretary Bill Sachs said it, it was the first time we invited agricultural workers

at USDA. Very ironic.

Believe me, we have been using that space ever since. This is what I'm asking right now in terms of us, having this space. And not everything -- I don't know if it's about norms or if it's about rules or if it's about what to have this working group. But for me, it's important to really understand how the different groups, not just to only when we have our discussions in our meetings to be able to give feedback. But it's to monitor, because it is our communities that we are representing.

Thank you.

JOE GRZYWACZ: So the conversation wrapped up really quick, you may have seen while Walter was speaking, Mily asked me, can you help a little bit to articulate what she has shared in a very personal way.

So for purposes of the agenda, future topics, however it is being organized, I mean, the official call that Mily is making is to sort of reestablish the farmworker working group. That is the official thing.

Now, of course, there is the question of what is the charge. So I've been sitting here

trying to figure out, well, what is a feasible charge kind of a question because immediately I don't even know what a charge question is to be honest with you, but that's beside the point.

But underlying each one of the sets of agendas that's occurred so far has been something that directly involves farmworkers. So at the essence of it is sort of this idea of, do we really understand the needs of farmworkers. And the three ideas that have come to me while I've been listening to Mily is we are in a space, translational science, right, it takes 17 years to move from a scientific finding to when it's implemented in practice.

One reason for that 17 years is that we usually go from bench to bedside. And what Mily is saying is, we need to go from bench to bedside, back to bench to bedside, back to bench to bedside, then to community.

So part of what I hear her asking for is when we are trying to make decisions about what data elements should be tagged in which way, we need to know which ones are most valuable to farmworkers. When we're trying to figure out what is the best way to translate labels, we need to be able to recognize that there isn't one translation that Google

translate or an artificial intelligence designed tools are going to be working on, it's a little bit more complex than that.

So you need real live people to help make those decisions rather than individuals who are perhaps, like me, who maybe have been working with the community for 20-some odd years, but I'm not from that community. I don't live in that community. I don't know what it's actually like to feel the discrimination and the experiences that they have. And that all his part of that shared meaning that underlies symbolic language that I keep coming back to.

So I think what I'm hearing Mily say is, if you really want to make traction on these things that you're doing great work with, there needs to be a reconvening of the farmworker advisory group to see to it that they are actually a sounding board for the very work that you're trying to engage in. That is my attempt.

JEFFREY CHANG: Any other comments? Charlotte?

CHARLOTTE SANSON: Yes, Charlotte Sanson with ADAMA. So one thing that I think might be of interest to this group is maybe some deeper

elaboration on how OPP is interacting on the global level and how some of the activities going on with the -- you know, the interaction engagement with other countries, what the key learnings are and how that is being applied into -- as a side decision here, I think that might be helpful.

And just one thing to say, this is my last session. It has been a really enriching experience, so I just want to say thank you and to everybody on the panel to say thank you. I have learned more than I really expected I would and it's always enlightening to learn from other people's experiences and perspectives. So I just want to say I greatly appreciate the opportunity. So thank you.

JEFFREY CHANG: Great. Mayra?

MAYRA REITER: Thank you. I think another issue besides those that have been mentioned so far that needs increased attention is how climate change interacts with pesticides and how that affects farmworkers. An example, when pesticides are registered, EPA decides the mitigation measures which may include certain kinds of PPE. With increased temperatures, we need to look at is that realistic. I mean, we know that there are many farmworkers who don't receive the required PPE. But

when they do receive it, are we making them choose between getting poisoned or having a heat stroke. I know I'm putting that in very dramatic terms, but it is true. Farmworkers die every year because of the heat. There is intersection between those climate issues and the things that we talk about here for pesticides.

Also, increased temperatures mean increased pest pressure which is going to mean increased use of pesticides over time, to deal with that. That is also an issue that I think needs more attention when we are thinking about how pesticides are regulated, about that registration process and what we need to do to protect the people who work in the fields.

Thank you.

MILY TREVINO-SAUCEDA: So I'm asking for the committee to support for that being a farmworker working group. So I want to make the motion.

ED MESSINA: So we have a motion, Joe has seconded. We can do discussion before we take a vote about that.

Were there any particular charge questions or do you think the group would develop charge questions? Mily, what would be your thoughts about

that? But we can after -- so the motion is on the table. Having being seconded, we will have discussion and then we'll have a vote.

Amy?

AMY ASMUS: Has it been seconded?

ED MESSINA: Yes.

AMY ASMUS: I just want to point out that Joe pointed out the word "run" and the different perspectives and I need to point out the word "farmworker" and the different perspectives, because the farmworkers you talk about are very different than the people that we have work on our farm.

And if we are going to do a farmworker work group, I would ask that it goes across spectrum and across different demographics of farmworkers and not just focus on one group.

MILY TREVINO-SAUCEDA: Can you elaborate more on that because we are in 20 states? So I'm not sure what you mean.

AMY ASMUS: So the employees that I have on my farm are, I think, thinking back to about four PPDC meetings ago, were referred to as privileged white people that work on my farm. And they are. They are locals that we employ to work on our farms. We have equipment that keeps them safe. They are

not out in the field harvesting; we have harvesters to do that.

So they are a very different group and they have a very different perspective, but they are still farmworkers. They are still applying pesticides, they are still -- I agree with the heat issues. They are still required to wear PPEs and do it. It's just a very different type of work than what you are talking about. And if there's going to be a farmworker group, I believe we need to have all of those different demographics. And I'm from Iowa and Minnesota, so just you can get the demographics of where I'm from. And we do corn and soybeans, not specialty crops.

MILY TREVINO-SAUCEDA: Can I respond to you? And this is in a very friendly way. I've never said every single one of the employers are abusive; I have said many. In Spanish, you say [Spanish]. That means -- I don't know how to translate it in English, but it's more like if you are guilty, then you, you know, you take it. If you are not, don't worry about it because I'm talking about whomever is abusive.

Farmworkers and us, who are representing, we are not trying to ask more than a dignified

treatment. That's all. That's all. We are not asking for anything else, but because we are not part of -- again, the same protections, you know, that other industries have, it is much easier for abuse to happen in many, many places.

I will always talk about -- and we have -- I have friends that are growers, I have friends that are farmers. I participate on a board of -- it's called the Rural Coalition and they are a part of our membership. A lot of them are farmers. We always talk about protections and we always talk about treatment and we always talk about how you could be a good example for other farmers. We always talk about that.

Believe me, we have created good relationships in terms of that. I'm talking about how there are many more companies that do not care, do not care. Maybe a lot of you, because you care, you are here and that is good. That is very good. That gives me more hope, gives some of us hope, but not -- out there, it's very different.

I'm not -- I don't exaggerate, I get passionate because I have gone -- I personally have gone through a lot of things and a lot of my relatives and people, all the thousands of people

that we work with, 30-some years, we have been organizing with farmworker women. A lot of -- you know, everywhere. The majority of our members have people that come in with problems with wage theft, abuse, in terms of pesticides, being exposed, and the only thing they do is send them to their company doctors.

What is the first thing? Okay, get a pill and then you go back to work, when, excuse me, several months later, I mean, we have stories and we have heard experiences of women -- women have gone blind because they have been exposed to chemicals. It's very hard to prove because you know how it is, the chemical after 24 hours or 48 hours, is not -- it doesn't show in your system. So it is harder to prove.

So it's about how can you prove that you have been poisoned when you don't even know that you have been poisoned or what kind of chemical there is, and we have been talking about this. People are not given their information. We just did -- when was it -- like before COVID, we did a survey with 500 farmworkers and this is in California where all these -- you know, there's a lot of protections in California, where it was -- there was this

legislation that was established where companies have to provide training to their workers on sexual harassment.

A year and a half, we did the study to see how many companies were complying. Of the 500 workers, 400 and some workers said they had never been told anything about that, you know, that that rule existed. This is a year and a half later. I mean, we don't -- we are talking about our realities. And sometimes it's not about making enemies here; it's about let's listen to each other. That is all.

I commend you if you are -- you know, because there have been -- it was only one company that my husband -- belated husband and I worked where that company was great. That was a great company. We even had health insurance. There was no union contract. The sad thing was I got pregnant, the owner saw me, and instead of giving me another kind of job, he told his crew leader that she can't be working here.

I was lucky I could get unemployment. Many people don't. They don't. Only California. I don't know how many other states -- and I would like to know -- have state disability insurance. I

was able to get some state disability insurance, but because I am someone that I learned through the United Farmworkers, about protections whatsoever. But where I'm getting at is, yes, I look like an angry woman, but, believe me, you have not seen me angry. I'm serious. Because when I'm angry, I am angry.

What I want to do is I get very anxious when I talk about our realities, because I'm not sure at times that people really are understanding that's what's going on.

ED MESSINA: Any more discussion? Joe?

JOE GRZYWACZ: Sorry, I was just going to give a crack at a charge question. I've been trying to come up with something and it is -- apparently, the sugar and the caffeine is wearing off.

But I would say the charge questions could be things along the lines of what does EPA know about the lived experiences of diverse farmworkers with regard to their interactions with worker protection standards and the protections in place for them. Again, I don't know what all the language is, but essentially along that line.

A second one would be something along the lines of in what way can farmworker perspectives and

experiences, again, diversely read, shape the design of regulatory requirements. So we need to meet regulatory requirements. How can the views of farmworkers be put at the front of meeting those regulatory requirements rather than being a back-end solution like we need to translate the labels? That is my best attempt to come up with charge questions.

I want to say that I fully agree with you, Amy, I mean, about in the midst of the COVID epidemic, we were working on a white paper to try to talk about how are we going to actually reach the agricultural workforce, and we were thinking okay, well, we can work around the concept of herd immunity, right, everybody in agriculture knows the concept of herd immunity.

As part of that getting ready, the point behind all of that is, you know, farmworkers are an exceedingly the first group to your point. About the largest segment at 43 percent of it is the farmworkers that Mily is talking about, but then the next largest portion, somewhere around 23 to 27 percent, are the farmworkers that you are talking about. Again, they are very different groups, governed and protected by very different systems or the lack of protections.

So your point about seeing to it that a farmworker working group is diverse, that captures those things, so that we can -- to steal something from Stephen Covey, begin with the end in mind.

You know, so if the goal is to see to it that workers are protected, well, let's think about that at the beginning as we are thinking about redesigned digitized labels or something along that line.

So to me, that's how it gets tied together a little bit. But I'm in full agreement with the points that you're making about making sure that the farmworker group is represented, the farmworker community.

ED MESSINA: Mily, can I ask a question? To what extent has the engagement with the National Environmental Justice Advisory Council helped with any of that? Because I think one of the reasons may be we haven't had the farmworker group is because of that engagement and also the fact that a lot of the roadmap has been paved for us in terms of all of the work we are trying to get done from the last report and from the NEJAC and also from PRIA 5 and bilingual labeling. So in terms of things that are happening, there is sort of a strategy. Is there a

gap that you see that exists with regard to the NEJAC and some of the things that you have heard about that we are planning on doing today?

MILY TREVINO-SAUCEDA: My understanding is that -- I was in NEJAC for six years. Okay? So my understanding -- and I was invited to come back and be a part of a working group, the farmworker working group, and I invited people and some of them joined. And we have been working for a year and a half, but there is information here that this group is working that is different from what NEJAC is doing. So this is why I'm asking for this committee to approve to have farmworker working group, so that whatever -- you know, for every -- I don't know if you have noticed, for every presentation, I said something, and it wasn't just because Mily wanted to say something, it's because it's a representation. But it's every how long.

What I'm asking is for a farmworker working group to be more involved and to be monitoring and giving feedback because it's our -- and it's the majority -- of our population that we are talking about.

ED MESSINA: If I were going to -- Joe, this is maybe back to you. Much like the other

groups had an implementation sort of charge, right we saw that today, Mily, would you be comfortable with -- it sounds like -- and I'm just trying to repeat back my understanding, Mily -- it could be more of an implementation group, help the agency focus on its priorities. And then probably borrowing from Joe's, like, additional priorities to, but would not be something that you're looking for as well, Mily? Kind of like an implementation group?

So we have other workgroups that are focused on implementation, right? That's the EPIC, for example. Would this group, in your mind, part of their charge be focused on how EPA is implementing all of the EJ stuff that is currently on its plate, including the report that came out from the last group. I'm just asking if that is something you would see as appropriate for this new group.

MILY TREVINO-SAUCEDA: I'm not the only one asking for it. I am more vocal. Well, not necessarily, I am more vocal, but yes.

ED MESSINA: Okay. Thank you.

UNIDENTIFIED FEMALE: Yes, and if I may also add -- and this goes to Joe's point with the

second charge question -- it's not about -- or not just about how EPA is implementing the policies and regulations that are already there, but going all the way upstream to when we are thinking about pesticide registration and what I said earlier about mitigation and other things, what we are asking farmworkers and growers to implement in the field is not realistic, then we need to take that into account when deciding whether a pesticide gets approved and gets into the market.

So that is something that also needs to be informed by the farmworker experiences that Mily was talking about. So it's not just monitoring implementation, which is great, and I totally agree with that. But we need to incorporate that information about farmworker experiences throughout the whole process of how we regulate pesticides, ensure implementation of regulations and policies, and then monitor that compliance and ensure that there is good enforcement.

ED MESSINA: Okay, great.

UNIDENTIFIED FEMALE: Yeah, I just wanted to add, Ed, to I think what was just said. One thing that I'm hearing or kind of observing is the comment or -- something that was landing with me is

Mily's comment that, you know, you have talked every single -- like this is threaded throughout. So all of the different decisions that are being made by all the different working groups, when those get too far down the road without some sort of checkpoints earlier on, then it's like, okay, well, you did all that work and we really appreciate all that work, and also now we are going to have to ask that some other things be considered. So the process isn't as maybe as efficient as it could be.

So what I'm wondering about, in addition to the questions that Joe put out there, is like is this a workgroup or is it a different type of group. I don't know if this organization has had that before, but I'm thinking almost like -- in the university setting, like an IRB for like the -- but from a farmworker perspective of the different projects that are going on. Some sort of review process or involvement. I could see folks on this group like having a person on each other working group and then coming together as a group to say like, this is what the working groups are working on and kind of making sure that that is threaded throughout in a way.

Again, I don't know if that is different

than the charge or the scope of a general workgroup would be, but I think making sure that that is a presence and, in some ways, like making it not a separate thing, but a thing that is actually threaded throughout everything that is happening.

JEFFREY CHANG: Any other commenters?

(No response.)

JEFFREY CHANG: Great.

ED MESSINA: So to summarize, just to help with this, it sounds like -- so we have a seconded motion on the table to establish a farmworker subgroup to the PPDC group. The charge questions are along the lines of -- and I'm tweaking some of the language here -- but how can EPA understand the lived experiences of diverse farmworkers about their interactions with the WPS and the protections around that regulation. In what way can farmworker perspectives and experiences shape the design of regulatory requirements?

Then the other one was how can this workgroup best help EPA in its implementation of all of its farmworker activities. That is how I would summarize it.

For the record, Joe is giving me a thumbs up; Mily is giving me a head nod yes.

So with that, we can start a vote. All in favor of establishing this workgroup with these charge questions, show of hands. I was going to say say "aye," but we are going to do a show of hands on this one. A show of hands on who supports the formation of this workgroup. Lots of hands.

A show of hands, who does not support the formation of this workgroup? Anyone online?

Okay. All right. The motion passes.

Next will be -- thank you, yes. Mily says thank you.

Next is a chair and then having folks farm out who would like to be on this workgroup. So we can do that next and then also we will appoint a co-chair from EPA who can help facilitate this group's work, you know, much like the other workgroups. We are pretty focused on our strategies, but I will try to make sure we can get someone who can facilitate the discussions really for this group to advise EPA and come back to the PPDC in May with any updates for what they have been able to accomplish. So thank you.

Anyone want to step forward and for the record say they are willing to participate in the workgroup?

Okay, anybody interested? Yeah, I just started with participate, I didn't say chair. I intentionally started there, okay.

Great. Are you recording the names?

Oh, here we go, participants, Becca, Alexis, Nathan, Joe had his hand up, Mayra, Walter. Did I miss anyone? Did anyone capture the notes here?

Okay, all right. I will let you guys convene your first meeting and then you guys can talk about -- set about going about a chair unless there's any recommendations for a chair.

Mily has --

MILY TREVINO-SAUCEDA: I'll be the chair.

ED MESSINA: Thank you. That is sort of what I was looking for, but great.

When somebody comes to me with an issue and says, you know, we should really do this, sometimes I say back to them, you may be the person you are looking for to solve that.

So thank you, Mily for stepping up.

With that, thank you. We'll go to conclusions and then public comment. I have lots of people to thank so I'm going to consult my notes.

So first of all, thank you for an amazing

two days of discussion. Again, I can't thank you enough for being respectful and also the advocacy that you bring. I don't want to cut short the advocacy. I think that is important as well. The personal stories you have shared are also impactful and the presentations were just top-notch in virtually every session. That is a testament to this group who developed this agenda, so much like going forward and having this past discussion. I think we have a future agenda.

Pivoting back a little bit, I heard maybe as a future topic for the next agenda, talking about NAMs, maybe talking around the science around organophosphates and the incorporation of NAMs in that. So I think we will put a takeaway and we will go through the transcript and make sure as we build the next agenda for the next group of folks that we suggest that as a topic so we can take a deeper dive there. I'm getting some head nods around that.

Joe?

[Microphone issue].

ED MESSINA: Well, that's a great question. For the Pesticides Office, you know PFOS arises more in the context of are there any chemicals that contain PFOS in the inactive

ingredients or inerts and then also the containers. Then we are sort of doing our normal chemistry.

For the TOSCA office, which is looking at PFOS in general and then the sort of PFOS action plan, I think the issues of systematic review and how we go about doing that sort of arise in that context.

So maybe I would not include PFOS unless others are having it be a part of the next session. We can talk about PFOS and sort of -- we had a couple of slides on my OPP update and that is sort of what we are doing for PFOS.

I'm wondering if systematic review is part of that. I think I heard of that as part of the discussions as well maybe over here. So we will bring that as a future agenda topic recommendation for the next PPDC group.

With that, Jeffrey, your first PPDC meeting and in-person PPDC meeting.

(Applause)

ED MESSINA: I mean, you knocked it out of the park. The meetings that Jeffrey and Michelle, and I had, multiple meetings to pull this off, you know, just the small things like the conference rooms and informing people was just great. And the

bar was set pretty high because we had to cancel the last one because we weren't able to pull it off. Jeffrey knew that there was no way that we were going to let this one get canceled, including the fact that when Congress extended the CR, it fell on the Friday. If it had fallen on the Thursday, I was going to have to cancel it again and I was just going to start pulling out what little hair I had left on my head. But it actually worked out.

So Jeffrey and Michelle, a definite shout-out.

Darlene, who is my special assistant, helped me, and just for the record, my slides were done at 8:59 a.m. on the day that I presented. So I was one of those folks that was furiously trying to pack. I was fully successful, it's really the next rating down.

For our Spanish accessible people who helped us out, David and Monica and Ian, our ASL and real captioning folks, Suzanne, Samantha, Pamela, Victoria, and Rhiannon. It was a suggestion I think by Mily and your group that these meetings should be bilingual. We took that back and the last three have been bilingual. It was just based on your group suggestion. So thank you for that and we will

continue to do that.

I'm excited that -- you know we put a new contract in place to make that happen, so I'm excited that it worked out. For those of you attending and listening in Spanish, thank you for attending and we are happy to accommodate that.

The IT team who coordinated the Zoom interface to allow virtual participation, my friends in partnership in IT, Elton, Faraz, John and Kevin; the conference center staff who managed this wonderful space, Kevin, Keith, Jay, and Dozina to get this space is pretty hard. It's the administrator's space and you are told you can have it, but the administrator could bump you at any minute. When they were trying to bump us for JNPRM, I said you're going to cause an international incident, no. So I wasn't able to do that for this meeting, but fortunately we were able to hang onto the meeting space.

The EPA securities team, for their thoroughness, Andrew, Kevin, Cedric; the guard desk staff are helping coordinate the public participation at this meeting; then all the staff who escorted the many members of the PPDC and members of the public, Emily, Ava, Dan, Darlene,

Christian, Lauren, Aidan, and others.

I would like to thank our presenters in no particular order, Jake Li, Lisa Dreilinger, Michelle Arling, Jan Matuszko, Nathan Donley, Ann Ruckert, Tajah Blackburn, Anastasia Swearingen, Rhonda Jones, Nikhil Mallampalli, Cameron Douglass, George Frisvold, Mike Goodis, Steve Schaible, Aidan Black, Susan Bartow, Mily Trevino-Sauceda, Mayra Reiter. Thank you for your great presentations and they were just really informative.

All of the workgroup members for the Pesticide Resistance Management Workgroup Number 2, the Pesticide Label Reform Workgroup, and the Emerging Pathogens Implementation Committee, or EPIC, I think the charge question for the Pesticide Resistance Management Workgroup is to have a better name. I think Joe suggested that. So for the, you know, PRES folks, great work.

To all of the PPDC members, including some of our special folks who are leaving us because they have termed out, very sad. There were a lots of asterisks, but Amy Asmus, Aaron Lloyd, Cameron Douglass, Charlotte Sanson Damon Reabe, Dave Tamayo, Dawn Gouge, Dominic Lajoy, Gretchen Paluch, Jasmine Brown, Jessica Ponder, Jim Fredericks, Mark Johnson,

Steve Bennett, and Tim Lust, your participation has been -- I would say it's almost irreplaceable. I think your input to this PPDC has been incredible and thank you for your many years of service in this regard. You know, the paycheck you get from this is pretty small. It includes lots of Zoom time, and every now and then I get a free trip to Washington, D.C., which isn't enough to compensate you for all the time that you guys have put in.

So with that, again, thanks, everyone, for their thoughtful remarks, for the presentations.

And then just one housekeeping item, the membership renewal process has begun for those folks that are terming out and inviting some new folks. Those invitations will be going out in the near future, and when they do they will be getting an email contact and then we will send out some information about picking for that group both the spring dates and the fall dates for 2024.

I would say I think we thought about doing a survey for logistics, you know, to this group. So for this group, stay tuned. We are going to give a little, you know, comment, how did the meeting go, kind of, you know, just the logistics pieces. So stay tuned for that.

And then, you know, based on how this meeting went and the in-person nature of it, which I am fine working from home in my flip-flops when I can, but it's really great to be in person. Even the side conversations that happen in the background where folks are getting to know each other, sometimes we have a lot of difficult issues to work through and it's better to work through those difficult issues when you are all already and have established a relationship with that person than if you're trying to work through that difficult issue and also establish that relationship.

So I really appreciate everyone being here in person and, also -- you know, contributing to this meeting, but also for the conversations that happened outside of this meeting.

Thank you for also sort of being gracious to our video crew that was here the other day, filming this for their own purposes and stories. This is a public meeting so we don't have any rights over our images and so folks are invited and they can videotape this and all the transcript is public and everything that is said is sort of going to be put on the transcript.

So I think we showed them exactly how

multiple stakeholders with multiple differing positions about a pretty sensitive topic, which is how do we feed our country and use pesticides in a safe manner, we can have that dialogue.

For me, as a civil servant, I don't take that term lately -- I do take my role as a servant to the American people to do my job -- it's really refreshing for people to hear different perspectives and people try to come together to provide those perspectives and also really try to come to a common solution. I think that is what really makes this country great, and I am just honored to be a part of that and to see it happening in action.

So I appreciate you participating in that and we'll see what kind of bad music is associated with our -- while I'm talking about paraquat because my envision of the show is going to be, you know, hopefully they do it justice and they give that topic what it is due and, also, the nuances and the sciences and the tricky scientific issues that the agency is struggling with is carried forward in that story. We shall see.

With that, I will turn it over and we have time for public comment, and then we will adjourn.

Thank you.

PUBLIC COMMENTS

JEFFREY CHANG: Thank you, Ed. Yes, we have two public commenters and will be respectful to them. So first up, we will start in the room with Bill Jordan.

BILL JORDAN: Thanks. My name is Bill Jordan. I'm with the Environmental Protection Network. For those who have not heard of this group, we are about 500 volunteers, most of whom, like me, used to work at EPA, and our NGO exists to support the agency in carrying out its mission of protecting public health and the environment. I have a number of colleagues who worked in the Office of Pesticide Programs who focus particularly on OPP's work, and I think we all share this enormous respect for the staff and management of OPP and appreciate how much great work they do. That's not to say that we agree with all that, but it is impressive given the limitations on the resources how much they accomplish, most of which is not even visible to the public, because they do a lot of stuff through the registration review processes, below the radar, if you will.

But they are really -- I want to congratulate you on the transformation that is going

to make the work smarter and better. You are smartly focusing on the high priority issues in the EDSP Program where you can get the biggest risk mitigation bang for your regulatory bucks. Same thing with ESA. I think you're being smart about where you are putting the resources and bringing real protections to those threatened and endangered species when you can and doing it quickly.

So there is a lot of work going on and I want to acknowledge that before I offer some suggestions about things that I think OPP could be doing better.

I have listened to the last day and a half of presentations by the PPDC and EPA folks. I wanted to think am I really going to add value here and I hope that the ideas that I offer are constructive and valued.

So I want to flag two aspects of OPP's effort that I think aren't getting quite the attention that they need.

The first is, I don't think that there is as good an understanding of what actually is happening in the field, users' actual behavior, how things are landing in the environment as you need in order to be able to improve and refine, and

continuously increase the level of protection for public health in the environment.

I think, at least, back five, ten years ago, the assumption was that EPA would digest the science, write great labels and people would follow the labels and things would be good. It seems to me that there is an evolving understanding in OPP, but it still has a lot farther to go in terms of getting your arms around what is actually happening in the field.

Mily and Mayra have talked -- given you anecdotes about things that they see that are happening. Epidemiological data suggests that there are problems that didn't get picked up through the animal studies. I think you have not fully mined the 682 data, the incident data. I'm glad to see that Walter and CDC is improving the SENSOR programs. But I think there needs to be a sort of unified field theory, if you will, for understanding what's really going on in the field.

I believe there is a lot of information pointing to more frequent instances of misuse of pesticides, particularly on the enforcement side in data I have seen in the ECHO database, that suggests that things aren't quite working the way that the

labeling says.

If that is the case, then the second area that I think OPP needs to pay attention to is what can alter the behavior. You are paying a lot of attention on the training side through training programs, through AFOP and the certification of pesticide applicators, but as many people have said, Charlotte among others, it all comes down to labeling because labeling is the law, as Gretchen would tell you, and I think you need to spend a lot of time thinking about how to deliver labeling to users in ways that they will understand, be able to use quickly, access readily, that's concise, that's clear, that's appropriate to fit their needs.

I am pleased that the efforts that Lisa Dreilinger and Manojit Basu and Michelle are doing and the Labeling Reform Group are pointing in that direction. But I think there is a sense of urgency that needs to inspire our workgroup to start paying attention to the user experience of getting labeling.

So I am optimistic. I really found the PPDC presentations and the conversations very encouraging. A lot of people are thinking hard about these issues, but I think these two areas, how

to get users to follow the labeling and to find out where the problems are lying in the real field world experience.

So thank you for letting me make a comment.

JEFFREY CHANG: Thank you.

We have one person virtually. Jeannie, you are welcome to speak. I hope that they promoted you to speaker.

JEANNIE: Hello? Can you hear me?

JEFFREY CHANG: We can't hear you. Are you talking?

JEANNIE: Hello, can you hear me?

JEFFREY CHANG: Yep, we can hear you.

JEANNIE: Hello?

JEFFREY CHANGE: Yes, now we can.

JEANNIE: Yes, I am.

JEFFREY CHANG: Can you hear us?

JEANNIE: Can you hear me? Okay, great. Yes, I have a cold -- a very bad cold and I have a bad internet connection so I'm going to do this really fast.

I'm going to bring up two different issues, one is regarding the SENSOR Program. I was at that meeting of the SENSOR meeting in Saint

Augustine a few weeks ago and it was really an excellent meeting. I will say, though, that I would like to say that I hope EPA can work with the SENSOR program because I understand that, right now, only cases of people between the ages of 15 and 64 are reported to the SENSOR Program and I think that that is a big mistake, I think that it should include people younger than 15, because there are children in the fields oftentimes, even babies in the fields and places -- and farmworkers that live next to the field. And there are farmworkers over 64 that are still working.

So that is one thing. [Connection issue] but I hope that the PPDC and folks on the PPDC will really consider expanding the age range for pesticide incident reporting to the SENSOR Program and no age limit, because, again, under 15 and over 64 should be included. That is one thing real quick.

The other thing, I will agree with Bill Jordan. I think that EPA is under the mis-impression that just because we have better WPS, that everything is okay. But working with farmworkers on a daily basis, we know that the WPS are often not followed and there is a lot of

noncompliance. You can have the best WPS in the world, but if people aren't complying with them and farmworkers are afraid to report anything, then it's not doing any good and people are getting exposed. That is my second comment.

My third comment, again, I can expand on this later, but I have a really bad cold. My third comment is that, you know, I want to say that I really appreciate the PPDC's and EPA's environmental justice efforts. It's exciting to see that and really encouraging to see that and the work around bilingual labels, et cetera. However, [connection issue] trying to address environmental justice completely -- oh, sorry -- completely goes out the window if we are continuing to approve really bad pesticides and if we continue to have a registration process that allows these really toxic pesticides, including using NAMs, to reduce protections for workers and four children. And I'm saying this as an animal rights activist who doesn't like to see animal testing.

However, the best solution would be not to have these chemicals in the first place so we wouldn't have to worry about contamination to the planet and people, but since we have these

chemicals, we need to protect people. And I personally, like Mily, I personally see farmworkers on a daily basis that have children with learning disabilities, autism, neural developmental problems, and they don't have the resources to get the help that other people with greater resources might have.

I can expand on all of those comments, but I just think that, also, the cost-benefit analysis for registering pesticides is very problematic because what is the benefit or cost to a human life.

I will end it there because my internet is pretty unstable. Thank you for the opportunity to speak and I'm happy to talk more about any of these issues. So please put them in the record. Thank you.

JEFFREY CHANG: Thank you. Our final commentor, E. Evans, please state your name and your affiliation.

Are you talking? We can't hear you.

(No audible response.)

JEFFREY CHANG: No, still can't hear you.

UNIDENTIFIED MALE: Hello, I think Evans was the same person as Jeannie Evans.

JEFFREY CHANG: Oh, okay, got it. Then we are all set.

Thank you, guys. Thank you everyone for coming, and if you could remember to leave your name tag on the desk.

ED MESSINA: Thanks, everyone. The meeting is adjourned. Safe travels.

(Day 2 adjourned.)