PUBLIC HEARING

STATE OF CALIFORNIA

ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT

In the matter of:
)
Notice of Proposed Rule-Making, Title 27, California Code of Regulations, Section 25705 for a No Significant Risk Level for Glyphosate
)

CALEPA HEADQUARTERS

BYRON SHER AUDITORIUM

1001 I STREET

SACRAMENTO, CALIFORNIA

WEDNESDAY, JUNE 7, 2017

1:30 P.M.

JAMES F. PETERS, CSR
CERTIFIED SHORTHAND REPORTER
LICENSE NUMBER 10063

A P P E A R A N C E S

STAFF:

Mr. Allan Hirsch, Chief Deputy Director

Ms. Carol Monahan Cummings, Chief Counsel

Dr. Martha Sandy, Chief, Reproductive and Cancer Hazard Assessment Branch

ALSO PRESENT:

Mr. Bill Allayaud, Environmental Working Group

Ms. Joan Blaxter, Weston Price Foundation

Mr. William Brooks, California Guild

Dr. James Bus, Exponent

Ms. Lucia Calderon, Safe Ag Safe Schools

Mr. Joshua Coleman, Autism File Magazine

Ms. Cynthia Corey, California Farm Bureau

Ms. Caroline Cox, Center for Environmental Health

Mr. Nicholas Chavez, United Farm Workers

Ms. Christine Dames

Ms. Jessica Denning, California Guild

Mr. John Diaz, Labelgmos.org

Dr. Nathan Donley, Center for Biological Diversity

Ms. Jessica Elkow

Mr. Pedram Esfandiary, Baum, Hedlund, Aristei & Goldman

Dr. Donna Farmer, Monsanto

Ms. Leni Felton, The Way of Health

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Ms. Michelle Ford

Dr. Stephen C. Frantz, Global Environmental Options

Ms. Mary Fraser, Pesticide Free Zone

Ms. Kathleen Furey, California Guild

Mr. Robert Gipson

Ms. Laura Hayes

Ms. Zen Honeycutt, Moms Across America

Ms. Susan Hopp

Ms. Olivia Kannier

Ms. Kathleen Kilpatrick, Safe Ag Safe Schools, PVFTKFT Retirees Chapter

Ms. Heather Kovac

Ms. Sharon Larsen, Moms Across America

Ms. Susan Lee

Ms. Janelle Lewis

Mr. Timothy Litzenburg, The Miller Firm

Mr. Harvey Makishima, Public Awareness and Preventive Health Care, California Guild

Mr. Bob McFarland

Ms. Linda Mulligan

Mr. Trenton Norris, Arnold & Porter Kaye Scholer

Dr. Michelle Perro

Mr. Joe Robichaud

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Ms. Emily Rooney, Agricultural Council of California

Mr. P.T. Rothchild

Ms. Diana Rudé, California Guild

Dr. Anthony Samsel, Samsel Environmental and Public Health Services

Mr. Bob Saunders

Ms. Deborah Whitman, Environmental Voices

Mr. Leo Younger, California Guild

I N D E X

I N D E X C O N T I N U E D

I N D E X C O N T I N U E D

P R O C E E D I N G S

CHIEF DEPUTY DIRECTOR HIRSCH: Good afternoon. My name is Allan Hirsch. I am Chief Deputy Director for the Office of Environmental Health Hazard Assessment, also known by the acronym OEHHA. And with me on my right is our Chief Counsel Carol Monahan Cummings, and on my left the Chief of our Proposition 65 program, Dr. Martha Sandy.

I just want to do some housekeeping items first that we're supposed to do at the beginning of public hearings. If you need to use the restroom during the public hearing, you would go out the back door, go to the left, and make another left turn at the end of the lobby, and they -- they're there on your right.

In the unlikely event that we have an emergency or a fire drill during this hearing, you would go out the back doors, turn right, go down the stairs at the end of the lobby and walk right out of the building.

And also, you're probably aware that today's hearing is being webcast. But if you would like to tell a colleague about the webcast, they can access it by going to https://video.calepa.ca.gov.

Under the provisions of the State Administrative Procedure Act, this is the time and place set for the presentation of comments orally or in writing regarding the proposed Proposition 65 no significant risk level for

glyphosate. The NSRL - that is the acronym for no significant risk level - is a regulation proposed for adoption by OEHHA.

OEHHA considers this proceeding to be quasi-legislative hearing, because it is carrying out a rulemaking function delegated to it by statute. OEHHA will take under submissions all written comments and oral statements submitted or made during this hearing.

The director of OEHHA has designated me to conduct this hearing on -- on her behalf. And I will be doing so in accordance with the provisions of the Administrative Procedure Act.

The entire proceeding is being recorded by a Certified Court Reporter, who is over on my right-hand side. And the transcript and all exhibits and evidence presented at this hearing will be included in the administrative record for this rulemaking.

Now, for organizational purposes, we request that those of you wishing to speak at this hearing complete a blue speaker's card. They should be on the table just outside of the meeting room here, and -- if you haven't already done so, of course. We already have a number here. And you can give it to Esther, who is sitting over there. Esther just waved.

However, you're not required to fill out a blue

card in order to speak. If you prefer not to fill one out, you will still have a chance to speak after those who have filled out blue cards.

So we know that many of you have come a long way to be here and we appreciate that. Welcome to Sacramento. Welcome to California for those who've traveled here from out of State. And we probably have a larger than usual audience for this hearing watching the webcast too. So welcome to the world of California's Proposition 65.

I just want to go over a few points today that hopefully will help the hearing be as meaningful and as productive as possible for you and for us.

So the first point is that this is a public hearing specifically on our proposed no significant risk level for glyphosate. And many of you understand this, but just in case some don't and for the purpose of people on the webcast who might not be familiar, it's not a hearing on whether glyphosate should be added to the Proposition 65 list. That's been addressed under a separate process. It's not a hearing on whether glyphosate should be regulated in a way that is different than it already is, as that's outside the scope of Proposition 65.

We are soliciting comments specifically on the proposed no significant risk level, and the scientific

assessment that we conducted in developing it. And so one kind of a simplified version perhaps of the questions that we're seeking your public comments on are things like did we get the science right or did we get the science wrong? And if you feel that we got it wrong, where did we go wrong and how do you think we should fix it?

And again, these are scientific questions. And Dr. Sandy and Ms. Monahan Cummings in a few minutes are going to give a short overview of Proposition 65 and our glyphosate assessment to help us all start out on the same page.

So having said that, I also want to be clear that you do not have to be a scientist to speak and we're happy to hear your thoughts, even if they don't address those specific questions that I just cited.

But we do want to make sure that everyone understands that this is a hearing on a proposed regulation that is based on scientific criteria. And the comments that we're seeking are primarily scientific in nature.

Though the second point is we do have a fair amount of people who want to speak. And because of that, we're going to ask you to limit your comments, let's say, to five minutes to make sure that everyone has a chance to speak. If you can't say everything you'd like to say in

five minutes, we understand that, and we strongly encourage you to submit comments to us in writing. There's no limit to the length of written comments that you can submit.

And our experience is that if you have lengthier complicated arguments, it's best to make them in writing. That way, we can carefully review them and be in a better position to respond to them as part of the rulemaking process.

Now the written comment period is open until June 21st, so that's two more weeks. And information on how to submit written comments is on our website, and I'll go over that at the end of the public hearing.

Conversely, if you agree with what previous speakers have said, it's fine to come up to the microphone when you're called, and to simply say that you agree with those speakers without necessarily having to repeat what they said.

So third, we've received a number of questions about blue cards, and how we -- how we determine the order of the speakers. This being California, we're pretty laid back. And for the most part, we will call speakers' names in the order that we receive these cards. And we may make some exceptions and change the order a bit to prevent any one point of view from dominating a large portion of this

hearing.

And also, if there are multiple speakers from a single organization, we'll try to group speakers one after the other to help you coordinate your responses. We can't promise that, if you have a group of 10 or 20 speakers, but we'll certainly do what we can.

And in order to sort out the order of the speakers before the comments begin, we'll take a short break, and I really mean a short break, of less than five minutes. So if your group wants to coordinate speakers, please indicate so on the blue card.

Last, but not least, we plan to be primarily in listening mode. So if we don't interact or respond to what you're saying, it's not because we're not interested. It's because we're not able to have a lot of back-and-forth discussion in the context of this public hearing.

But we -- and we want to make sure that we're able to hear everyone who wishes to speak. So we will be responding in writing to all relevant comments that we get at this hearing, as well as during the written public comment period, when -- if and when we adopt this regulation. And again, our court reporter is transcribing all of your comments, so we're not going to miss anything.

And we will answer clarifying questions to the

extent feasible. But again, longer or more technical responses to relevant comments will be provided in writing.

So to enable the audience to hear you and to ensure that your comments are recorded for the record, we're going to ask speakers to come to either of the two microphones here. And then what I'm going to do is call the name of the current speaker, and then the two speakers in line after that. So when you're next after the person who is speaking, we would appreciate it if you could make your way to either of the two microphones. And that will help the hearing move faster.

When it's your turn to speak, it would be helpful to the court reporter if you state your name and the organization that you represent, if any. However you're not required to do so in order to speak.

So with that, I'm going to turn the microphone over first to Carol Monahan Cummings for an overview of Proposition 65, and after that to Dr. Sandy for the -- an overview of the proposed no significant risk level.

(Thereupon an overhead presentation was presented as follows.)

CHIEF COUNSEL MONAHAN CUMMINGS: Thank you, Mr. Hirsch. Thank you.

So in order to save the time required to read

into the record each provision of the proposed regulation and the related documents, I've already presented a copy of OEHHA's regulatory package to the court reporter that includes the public notice of these regulations, the Initial Statement of Reasons, and related documents.

As required by the Administrative Procedure Act, the public and interested parties were notified of these proposed regulations 45 -- at least 45 days prior to today's hearing. The notice of this proposed regulation was published in the California regulatory notice register on April the 7th, 2017. It was posted on OEHHA's website and sent by mail to interested parties who are on our listserve -- sorry -- on March 28th, 2017.

So if the court reporter could go ahead and mark the exhibits as OEHHA's Exhibit A.

(OEHHA's Exhibit A marked for identification.)

CHIEF COUNSEL MONAHAN CUMMINGS: Thank you.

Okay. As Allan mentioned, I'm going to go into a little bit of general background on Prop 65 and the context that we're here in today, because we are aware that there may be a number of you that aren't as familiar with the law as some others may be. So we want to just make sure everybody starts in the same place.

Next slide.

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CHIEF COUNSEL MONAHAN CUMMINGS: Sorry, I guess I could do that.

(Laughter.)

CHIEF COUNSEL MONAHAN CUMMINGS: Okay. So we call it Prop 65. But the law that we're here under today is the Safe Drinking Water and Toxic Enforcement Act of 1986. It was adopted as a ballot initiative. And OEHHA is the implementing agency for this law. And that means that we maintain the list of chemicals that are known to the State to cause cancer and reproductive toxicity, we have, over the last 30 years, identified about 850 chemicals that meet that criteria.

Next slide.

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CHIEF COUNSEL MONAHAN CUMMINGS: Sorry. I did it again. So the specific requirements of Prop 65 are actually fairly limited. The -- this law does not ban or restrict the use of any chemical. It applies only to businesses with 10 or more employees and does not apply to governmental entities federal, State, or local.

The law requires that businesses warn the public of significant exposures to the chemicals that are on the list prior to exposure. Businesses are also prohibited from discharging significant amounts of the listed chemicals to sources of drinking water, although there are

a number of exceptions to that particular rule.

The Attorney General, local prosecutors, and private citizens can sue to enforce the law civilly. And just as an aside, even though it's kind of unusual, as the implementing agency, we actually don't have enforcement authority under Prop 65. So if you are interested in the enforcement aspects of the law, that's not what we do here. We do the science.

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CHIEF COUNSEL MONAHAN CUMMINGS: So just for context, we -- OEHHA has determined that glyphosate will be added to the Prop 65 list of chemicals known to the State to cause cancer. However, the chemical hasn't actually been physically added to the list yet due to some litigation that was filed. And we are currently waiting for a decision from the court of appeal on whether or not a stay will be entered. It was requested by Monsanto company. And we haven't heard from the court whether a stay will be entered.

If there is a stay, then we would withdraw this rulemaking until such time as the chemical or the case is resolved, because we can't adopt a level for a chemical that's not listed.

So we're proceeding on the assumption that we would be listing the chemical and we wanted to provide a

safe harbor level concurrent with that listing, so that businesses know when a warning is required or when a discharge is prohibited.

This chemical was listed pursuant to the listing mechanism we call the labor code listing mechanism. It's in section 6382(b)(1) of the Labor Code. And it's based on a finding by the International Agency for Research on Cancer - we call them IARC - which classified glyphosate as a Group 2A probably carcinogenic to humans with sufficient evidence of carcinogenic activity in animals.

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CHIEF COUNSEL MONAHAN CUMMINGS: So what's a safe harbor level under Prop 65?

That's why we're here today is we're considering the adoption of a regulation that would establish a safe harbor level. These are not limits on the use of a chemical. As I mentioned, Prop 65 does not ban or limit the use of any chemical, but safe harbor levels are established for listed chemicals to help businesses determine when they need to provide a warning, or are prohibited from discharging the chemical.

Businesses can use the safe harbor levels as guidance by comparing them to the exposure estimates for their particular product. Businesses are not required to use the safe harbor levels. They're compliance assistance

for businesses. And under our regulations, they are able to establish a different level, if they choose to do that, in litigation.

When we adopt a safe harbor level, we are required under our regulations to use evidence and standards of comparable scientific validity as the basis of the listing. And you can find more of that criteria in our regulations. So I've got the citation up here on the slides.

I should mention also that these slides are available on our website. And so if you're -- if you didn't get copies or you want to look at them later, they're available at the same place as the notice and other information on this rulemaking.

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CHIEF COUNSEL MONAHAN CUMMINGS: So a safe harbor level for carcinogens is defined in our regulations as the daily intake level calculated to result in one excess case of cancer in a population of 100,000 exposed individuals. So that's the criteria we use, 1 in 100,000 risk level. And Martha will get into the details of that in a minute.

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CHIEF COUNSEL MONAHAN CUMMINGS: So just -- I know this is a little bit busy of a slide, but this just gives you an idea of the process that we follow to adopt a

regulation such as this.

So we've already done our scientific analysis to determine what's the most sensitive study that we want to rely on for this particular rulemaking. We've proposed the NSRL and released the documents to the public. And we're at this middle place with the 45-day comment period actually has been extended to 60 days. And we're having the public hearing today.

The next steps will be that we consider the comments we receive today and the ones in writing, and decide whether or not we want to change the level that we have proposed. If we decide to change the level, we'll publish another public comment period notice, and the public can comment on it again.

And we keep going around that loop until we come up with a number that we want to stay with. And once we've decided to adopt a number, then we publish a document we call the Final Statement of Reasons, which is required under the Administrative Procedure Act. We provide that to the Office of Administrative Law, and they determine whether or not we've met all the criteria for adopting a regulation, and if so, then we'll announce on our website that the regulation has been adopted, and what the effective date is.

Under current law, regulations are effective

quarterly, and so it depends on -- when the regulation is submitted and approved, it depends when they would be adopted.

So I'm going to go ahead an turn it over now to Dr. Sandy, and she'll go into a little more detail on this particular NSRL.

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DR. SANDY: Thank you very much, Ms. Monahan Cummings.

So, let's see, how can I use the pointer? Is there a pointer function?

CHIEF COUNSEL MONAHAN CUMMINGS: I don't know.

DR. SANDY: Do you know? I don't want to turn it off.

The red button. Okay.

That doesn't seem to work.

Well, we won't use a pointer.

The -- so right now, we're at the public hearing stage, but I'm going to talk more about that first box, the scientific analysis.

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DR. SANDY: Okay. So the scientific analysis for NSRL development involves a dose response assessment. And a dose response assessment is performed to determine a chemical's likelihood of causing cancer depending on the

dose received. The figure on this slide, that graph, shows a dose response. The fraction of the animals with a particular biological response - in this case, we're talking about tumors - is plotted on the vertical axis, and that's plotted by dose.

So at the far left on the bottom zero dose and dose would increase. And you see that there are four points on this graph. So as the dose increased, the fraction of animals in each group with a tumor increased.

So we analyze dose response curves like this, and we estimate the slope of that dose response curve in the lower dose range, and we derive something we call the cancer potency estimate. It's an estimate of the slope at the low dose range. It's a measure of a chemical's potency as a carcinogen.

Now, below that figure, I have another bullet that talks about exposure assessment. And exposure assessment is a different type of analysis altogether. And we have not done one. Exposure assessment is used to determine the actual level of exposure from a product or an activity.

And exposure assessments for specific exposures are done by businesses causing the exposure and by others like us and other groups. And those estimated levels of exposure can then be compared to the no significant risk

level to determine if a warning is required.

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DR. SANDY: So now I'll go through the scientific process for developing a no significant risk level.

First, we estimate the cancer potency by conducting a dose response assessment, as I discussed in the previous slide. And a cancer's -- sorry. A chemical's cancer potency estimate is an independent measure of that particular chemical's ability to cause cancer. So some carcinogens are more potent than others, and some carcinogens are less potent than others.

The next thing we do, after we have that cancer potency, is we calculate a risk specific intake level. And under Proposition 65, we calculate that level as the daily intake of a chemical to enter the body that poses a lifetime risk of cancer of 1 in 100,000. So 1 in 100,000 is our risk-specific level under Proposition 65. And we define this intake level as the NSRL.

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DR. SANDY: So as mentioned earlier, the estimation of cancer potency must be based on evidence and standards of comparable scientific validity to the evidence and standards which form the scientific basis for the listing. The listing of glyphosate was based on the IARC carcinogenicity evaluation. And IARC concluded that

there was limited evidence of carcinogenicity from studies in humans; that there was sufficient evidence from studies in experimental animals; and that there was strong evidence that glyphosate has two key characteristics of known human carcinogens: Genotoxicity and Oxidative stress.

And as shown on the slide, genotoxicity is the ability to cause mutations and other DNA damage that can lead to cancer. Oxidative stress is an imbalance in cellular oxidation status that can result in oxidative damage to DNA, and genomic instability, and that can also lead to cancer.

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DR. SANDY: So for glyphosate, IARC found the evidence of carcinogenicity from studies in humans to be limited, and the evidence in animals to be sufficient.

OEHHA, in selecting studies for cancer potency estimation, reviewed the animal studies that are discussed by IARC in the monograph published in 2015, and identified the most sensitive study of sufficient quality for a dose response assessment. And that was a two-year diet study conducted in male CD-1 mice.

This study was performed by Inveresk Research International. And the study design and findings were summarized by IARC in 2015, and by the joint FAO/WHO

meeting on pesticide residues in 2006. Those FAO and WHO are entities of the United Nations. The Food and Agricultural Organization and the World Health Organization.

So the tumor incidence data used in our dose response analysis are presented in the table on this slide. You can see that the tumor type that was observed was hemangiosarcoma. Those are malignant tumors of blood vessels. And you see that there were -- there was a control group that received zero dose of glyphosate. There's three other groups of animals that received either 100, 300, or 1000 milligrams per kilogram per day of glyphosate.

And you can see that the response rate of tumors, animals with tumors is in that row in the table. And we did a trend test, so did IARC. And the exact trend test indicates that this is a -- that you can see the P value is very low. This indicates that the tumors that were observed were very likely related to the glyphosate exposure, and not due to some other random factor. So these are the data that we modeled.

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DR. SANDY: Now, in selecting the model approach, we noted that IARC in its conclusion noted that overall the mechanistic data provides strong evidence for

genotoxicity and oxidative stress. There is evidence that these effects can operate in humans.

So OEHHA used the multi-stage polynomial model for cancer, which is in the U.S. EPA's Benchmark Dose Software. We applied this model to the data that I showed you in the previous slide, and we derived a cancer potency estimate. And this estimate is shown in the table on this slide as the animal cancer potency. That's the middle column there.

And then we have to take into -- so that's the animal cancer potency. We did an interspecies scaling approach to take into account differences in body size between humans and experimental animals to derive the human cancer potency. And that is shown in the last column there. It's very small. It's 0.00062 per milligram per kilogram per day. So that's the human cancer potency estimate.

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DR. SANDY: And then once we have the potency estimate, we can calculate our risk-specific intake level for glyphosate. And this slide shows how we do it. We have the formula. The NSRL is equal to 1 times 10 to the 5th. That is our risk-specific level. That's 1 in 100,000 cases of cancer. And we multiply by the assumed body weight of a human, 70 kilograms, and then we divide

by the cancer potency that I had showed you, and which is listed here on the slide right below. And then to convert the units to get micrograms per day, we have to multiply by that factor of 1000 micrograms per milligram.

And in doing -- plugging the number in to this formula for cancer potency, we get the NSRL as 100 micrograms -- sorry 1100 micrograms per day. So that's the NSRL we've proposed. And this is the number that can be compared to estimated estimates of exposure to determine if warnings are required.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Well, thank you very much. You know, I had said earlier that we would take a break at this point, but it's 2:00 o'clock -- actually after 2:00, and I've been looking through the blue cards, and there's only just a very, very small number, apparent from the blue cards, of multiple people from the same group. So I think we're in a good position to just go on with the public comments, and -- okay. I'm getting some nodding yes. So that's good.

So we're going to start with Laura Hayes and then to be followed by Joshua Coleman and Heather Kovac.

So if -- okay.

MR. HAYES: Is it on?

Yep. Okay.

My name is I'm Laura Hayes. I'm from Granite Bay, and I'm a parent of three now adult children, and looking forward to being a grandparent one day. And I'd like to be a grandparent of healthy children.

Members of OEHHA, you have before you a critically important decision to make. Do you permit the use of glyphosate, which is now pervasive in the soil in which our food is grown, the water which we drink, the meats and foods which we consume, and the air that we breathe?

Do you permit this toxic chemical's use at the random rate of 1100 micrograms per day per person with no accurate way to monitor or enforce such a rate, and with no accounting for a person's age, weight, health status, types of exposures, or present load of toxins, or do you permit the use of glyphosate at a lower, but still random rate, which also cannot be accurately monitored or enforced, and again without personal factors taken into account, or do you act on the growing body of evidence that shows that there is no safe level of glyphosate and declare that its use will no longer be permitted in the State of California?

At this point in time, and we'll hear from some of our esteemed scientists today, we know that glyphosate is both tumorigenic and carcinogenic, meaning that it

causes both tumors and cancer. We know that it causes cancer cells to proliferate, whether it was the original cause of those cells or not. We know that glyphosate is a neurotoxin, meaning that it damages the brain. We know that it is an endocrine system disruptor, meaning that it adversely affects hormones causing developmental, reproductive, neurological, and immunological problems.

We know that glyphosate can substitute for glycine during protein synthesis. I have attached a list from Dr. Stephanie Seneff of MIT, which explains the many negative health consequences that result when glyphosate substitutes for glycine during protein synthesis. She considers one of the most serious consequences to be the disruption of the digestive enzymes which can result in autoimmune disease.

To break things down to a very practical level, here are a few questions to consider:

Number one, if I asked you which apple you wanted to eat, or feed to your child, or grandchild, would you choose the one sprayed with poison, i.e. with glyphosate, or the one not sprayed with poison, the clean and untainted one?

Question 2, if I asked you which glass of water you wanted to drink, or give to your child, or grandchild, would you choose the one in which glyphosate runoff was

present, or the one without a known carcinogen and no neurotoxin included?

Question 3, if I asked you which plate of food you wanted to eat, or give to your daughter, or granddaughter, who was breast feeding her newborn, would you choose the plate of food on which the meat, potatoes, vegetables, and roll were all heavily laced with the skull and cross bones labeled glyphosate whose Monsanto testers wear Hazmat suits when field testing it, or would you choose the plate of food cleanly raised and which was grown with no known health hazards?

Final question. How will you answer your spouse, children, and grandchildren who receive a cancer diagnosis, who struggle with infertility, who suffer from thyroid problems, who are brain damaged in some way, or who succumb to any of the myriad health and development issues now plaguing our population in never seen before numbers, when they ask you if you personally ever permitted anything known to be carcinogenic, neurotoxic, or hormone and endocrine disrupting, during your tenure at OEHHA?

Each of you knows what the right thing to do is. The question is, will you choose to do it?

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Okay. Next speaker Joshua Coleman from Autism File Magazine, followed by Heather Kovac and then Janelle Lewis.

MR. COLEMAN: Hi. My name is Joshua Coleman. And I'm a California resident. I was born and raised here. I'm just going to keep this short and sweet. I'm not comfortable with any level of poisons, glyphosate, in California. And I'm hoping that we will completely limit it to nothing.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Heather Kovac followed by Janelle Lewis and then Anthony Samsel.

MS. KOVAC: Good afternoon. Thank you for having this hearing. I'm Heather Kovac from South Lake Tahoe.

I would like to say I agree entirely with Laura Hayes and also Josh. I think it's alarming how we're finding glyphosate in just about everything we eat and drink and that it's even supposed to be organic. And as a mother of two boys, I hope that you could come to no safe level for this chemical.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

The next speaker Janelle Lewis, followed by Anthony Samsel and Olivia Kannier.

MS. LEWIS: Good afternoon. My name is Janelle Lewis. I'm a mother, a grandmother, a long-time credentialed teacher, and an advocate, an activist for people with developmental disabilities, many of whom have been tragically impacted by environmental toxins, including pesticides.

I'm passionate about researching and understanding the impact that environmental toxins are having on the health and well-being of our children.

Many thanks to all who have been involved with adding glyphosate to the California State Proposition 65 toxics list. When an NSRL, no significant risk level, for glyphosate is established, that level must be 0.

Exposure to glyphosate is not in isolation. It acts synergistically and cumulatively affecting different individuals very differently, and unpredictably based on age, weight, genetic pre-disposition, previous toxic exposures, existing health conditions, many, many factors.

It is preposterous to say that there is any level of glyphosate exposure without significant risk for a new born baby, for example. What is the risk level for someone who already suffers from myriad health problems from severe toxic exposures. We do not know the risk levels for any one person at any given time in their lives. I hope this is taken into consideration when

science is evaluated.

For many years, I was a classroom teacher for children of migrant farm workers in Central California. Those children, and their families, intimately knew about the risks of glyphosate exposure, even though they were told that their exposure to glyphosate was perfectly safe.

They knew enough not to eat, nor to let me eat, the crops that came from the fields in which they worked, fields that were heavily sprayed with Roundup. The parents told me stories about frequent miscarriages, about skin and eye lesions, about respiratory problems, and vomiting, and about cancers that resulted from working in the fields. They knew first-hand the cause of their health problems. They did not need a scientist to tell them.

A recent UCLA study, which I've attached in my -- to my statement, found that the advanced thyroid cancer rate in some California counties is well above the national average. The research suggested that there was an environmental component in explaining why the incidence of advanced stage thyroid cancer is much higher in California than the national average.

Dr. Avital Harari, a member of the UCLA Jonsson Comprehensive Cancer Center, said, "California has the largest amount of farmland in the country, so this type of

exposure could very well contribute to our cancer rates".

The research continues in investigating the links between thyroid cancer and exposure to pesticides. People deserve to know the risks associated with glyphosate exposure, whether they are working in agriculture, shopping at the grocery store, feeding a pet, or playing on a sports field, they deserve to know that there is no guaranteed safe amount of exposure.

We all come with different accumulated toxic loads with differing synergies, with different health profiles, different genetic makeups, different ages. There is no safe allowable daily exposure to glyphosate for any of us.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker Anthony Samsel, Samsel -- representing Samsel Environmental and Public Health Services, followed by Olivia Kannier, and then Zen Honeycutt.

DR. SAMSEL: First, I'd like to thank the panel for this opportunity to speak, and address this issue on the proposed no significant risk level for the chemical glyphosate to be adopted into regulation in Title 27.

I'd first say that there are no save levels of glyphosate. That statement originated with me in my

studies over the past several years. I've written six papers on the subject, and I have two more in process. I'm continuing the research on glyphosate.

Glyphosate is a synthetic amino acid and analog of our canonical amino acid glycine. It participates in both plant and animal biology. Contrary to what was originally thought by Monsanto that it only affected plants, archaea, and bacteria.

One microgram of glyphosate technical acid, phosphonyl -- n-phosphonylmethyl glycine contains 3.561 trillion molecules. Each of those molecules are capable of integrating with protein altering shape, folding, and function.

I am a U.S. scientist and hazardous chemical material consultant, an expert on the subject of glyphosate. I'm one of the few people that received all of Monsanto's trade secret studies of glyphosate from the U.S. EPA, the federal agency supplied me these documents, in excess of 100,000 pages.

I now have six peer-reviewed papers. I call on the California Environmental Protection Agency to immediately ban this chemical and not to set a limit of 1100 parts per billion for this chemical. There should be zero tolerance for this chemical, and I'll explain.

Monsanto claims glyphosate to be safe to animals

and humans, because they do not possess the Shikimate pathway, a pathway which is disrupted by glyphosate in plants, archaea, and bacteria. Glyphosate is known to disrupt the enzyme EPSP synthase 5-enolpyruvylshikimate-3-phosphate synthase.

However, this statement is now inherently false. As glyphosate was found by Samsel in 2016 to inhibit digestive enzymes, and others found in animals and humans, glyphosate is a protease inhibitor, including digestive enzymes. Such disruption of human enzymes is well known to lead to a host of modern diseases including cancer.

Again, lysozyme is an antibacterial enzyme that is an integral part of the innate immune system of humans and other animals. Monsanto found significant tissue damage to all glands and organs in their two-year long-term studies of glyphosate in mice and rats. Tissue damage stimulates the production of fibrocytes.

Glyphosate reaches the end of the line in the capillaries in the extra cellular matrix, where it is escorted one molecule at a time into the cell where it participates in protein synthesis and is excreted by the cell. This I noted in my past two papers, Glyphosate 5 and 6.

Fibroblasts also produce the structural proteins, which include the 27 stypes of collagen, elastin

glycosaminoglycans and the glycoproteins of the extra cellular matrix. So glyphosate is along for the ride, even bridging assembling strands of proteins affecting shape, folding, and function. Glyphosate should not be part of any biology.

Also, fibrocytes and fibroblasts are differing states of the same cell the fibroblasts of which are involved in immune regulation via TAF-derived elements of the ECM and modulators. These ECM components, like TSP-1 are associated with sites of chronic inflammation and carcinomas. This is where glyphosate causes many funky cancers, as its association with fibroblasts.

I've published results of lab analysis and experiments of glyphosate integration with structural proteins. You'll note that Stephanie Seneff, my colleague, is also coauthor on all of these papers with me. The laboratory work and the enzyme research is my ongoing work. And I'd be happy to supply any additional information to you folks.

Protein function involves ligation of ions in both small and large molecules through random collisions.

Oops, sorry. Could I take one minute?

CHIEF DEPUTY DIRECTOR HIRSCH: If you could wrap-up, yeah.

DR. SAMSEL: Okay. Protein function involves

ligation of ions of both small, large molecules through random collisions. The ligation involves the wrapping of the substrate around protein, which changes its shape, blocks its ability to function.

In conclusion, glyphosate -- excuse me. In conclusion, the fact that glyphosate integrates with human enzymes, as published in our last paper, should be enough reason to ban the chemical completely and also to prevent any level of glyphosate being allowed into the food supply.

There should be no glyphosate in the food supply nor in drinking water, air, or soil. Glyphosate is a synthetic amino acid that should have no place in biology.

We are but one biosphere. What affects one, affects all.

CHIEF DEPUTY DIRECTOR HIRSCH: All right. Thank you.

Next speaker, Olivia Kannier followed by Zen Honeycutt and Nicholas Chavez.

MS. KANNIER: I'm Olivia Kannier, a concerned mother. And I'm in agreement with the commentary of all the previous speakers.

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

So then the next speaker Zen Honeycutt from Moms Across America, and then followed by Nicholas Chavez and

Stephen C. Frantz.

(Thereupon an overhead presentation was Presented as follows.)

MS. HONEYCUTT: My name is Zen Honeycutt, and I'm a mom of three boys who had severe health issues before we began avoiding glyphosate in our diet. I'm also the founder and director of Moms Across America. And I speak on behalf of thousands of mothers and families who are struggling with health issues in California.

We do not want any glyphosate exposure to our children through food, water, the environment, or any products. We want the current products, which do contain glyphosate, to be immediately labeled. The current scientific data and skyrocketing numbers of our children and family members with chronic illness and cancer show us that the only ethical action for the California EPA to -- is to declare a no safe level of glyphosate, zero.

Before you dismiss this request as unreasonable, consider that the amount of glyphosate in our food and the OEHHA current proposal is actually what is unreasonable.

The levels of glyphosate in our food currently, and the risk we face due to the allowable levels of glyphosate residues are -- as set by the EPA are as follows:

This is for a 22 pound child throughout the day.

--o0o--

MS. HONEYCUTT: On the left side, you can see -- go ahead. On the left side, you can see the amount that has been detected by the FDA. On the right side, you can see the amount that is allowed by the EPA.

--o0o--

MS. HONEYCUTT: Again, on the left side, 1640 detected, for hummus and pita, on the right side allowed, 5100. This is micrograms per kilograms. This math is all checked over by a scientist.

--o0o--

MS. HONEYCUTT: Ug's detected for -- milk. There is no detected -- there is no allowable level by the EPA in milk.

--o0o--

MS. HONEYCUTT: Corn chips up to 2547. Are you showing -- they can see?

Okay. Thank you.

--o0o--

MS. HONEYCUTT: And then berries allowed 22 milligram per kilogram.

--o0o--

MS. HONEYCUTT: Pasta, 560.

--o0o--

MS. HONEYCUTT: I'm sorry, this one shouldn't be

in here, because we couldn't determine eggs and all that.

Orange juice.

--o0o--

MS. HONEYCUTT: Water, this is per day.

--o0o--

MS. HONEYCUTT: Eggs. This actually exceeds the amount that has been detected -- exceeds what the EPA allows.

--o0o--

MS. HONEYCUTT: In one piece of toast and jam, we will -- a child is currently right now exceeding the level -- the proposed NSRL.

--o0o--

MS. HONEYCUTT: So the total intake of a child in America today is currently 2 -- at least 2.2 times higher than the proposed NSRL. And the allowed -- the risk that they are - you have to consider the risk of the EPA is - 5.6 times higher.

So it's clear that the amount of glyphosate in our children are and could be exposed to, according to the EPA, is millions of times higher than has been shown to cause liver disease, destroy the gut bacteria or cause cancer.

According to the law, which is 25703, California Code of Regulations, this was not followed. The OEHHA is

supposed to consider all available studies showing harm, including epidemiological studies, for exposure, for example, in Mesnage and Michael Antoniou's study of four nanograms per kilogram caused liver disease, which predisposes cancer. This study is 4 -- this level is 4000 times lower than the proposed NSRL.

Carrusco and Monika Kruger's study, glyphosate has shown to destroy beneficial gut bacteria at 0.1 parts per billion, which is in micrograms, and promote the proliferation of pathogenic gut bacteria.

The gut bacteria is where 70 percent of the immune system lies, making a child much more likely to get cancer. And cancer is now the number one or two killer of children in America today.

High levels of daily glyphosate exposure can create an environment for the gut for Candida and fungus, which cause inflammation and can contribute to autoimmune disease and cancer. Destroyed gut bacteria cannot expel heavy metals properly. The toxins build up in the liver and the body, which can lead to cancer.

When glyphosate destroys the gut bacteria, the gut biome can no longer make essential hormones, which can lead to multiple forms of cancers such as thyroid, non-Hodgkin's lymphoma, breast and reproductive cancers.

One out of two males and one out of three females

in America are expected to get cancer today. The lowest level of glyphosate showing harm is Thongprangisang's study of one part per trillion showing glyphosate stimulating the growth of breast cancer in vitro. This means, according to the EPA, that the lowest level should be 100-fold less -- the NSRL should be 100-fold less than this, which is actually ten parts per quadrillion, which is picograms.

This is millions of times lower than the proposed NSRL. However, because of Ridly and Mirely's and Monika Krueger's study showing that glyphosate bioaccumulates in the bone marrow, that ten parts per quadrillion should be a one-time lifetime exposure, not daily. Bioaccumulation is why there is no safe level of glyphosate.

I want you to know, I know I just have seconds left, I get contacted by moms every day that they have chronic illness or cancer. I am a avoid -- my son is avoiding cancer by avoiding glyphosate. He had gut inflammation. But we can afford organic. What about the families that cannot afford organic. You have an opportunity for all of Californians to help the people who cannot afford organic to reduce their exposure of glyphosate because we know that when they -- we have a no safe level of glyphosate, food companies will have to label their food. And instead of labeling their food,

they will take ingredients out that contain glyphosate.

We can shift the health of the entire State and country by you setting a no safe level of glyphosate.

Thank you so much.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you. And if there are other presentations, just so you know, the three of us up here have screens. So if we're not turning around and looking at it, it doesn't mean that we're not interested. We're following it on our screens here.

Okay. Nicholas Chavez United Farm Workers, followed by -- and I'm sorry. I'm not getting the name right -- Stephen C. Frantz, and Michelle Perro.

MR. CHAVEZ: Good afternoon. My name is Nicholas Chavez and I'm here on behalf of Arturo Rodriguez, President of United Form Workers, who has asked me to make a statement on behalf of the United Farm Workers.

Thank you for the opportunity to address the Office of Environmental Health Hazard Assessment regarding the proposed no significant risk level of Roundup.

For over 50 years the United Farm Workers has worked against farm worker exposure to harmful cancer-causing pesticides. And has worked to protect farm workers and consumers from systematic poisoning through the reckless use of agricultural toxins and chemicals.

There is nothing the UFW cares more about than the lives and safety of our farm worker families. There's nothing we share more deeply in common with the consumer of our food than the safety of all food of us -- the food that we are relying upon.

What good does it do to achieve economic progress for people when their health is destroyed in the process. What good does it do to buy California when the food we are buying is not safe?

Just last month, the pesticide spraying stopped farm workers from harvesting in Bakersfield. The workers were in the process of harvesting cabbage when they began to get sick. About 12 reported symptoms from vomiting, nausea, and one person fainted.

In the end, more than 50 farm workers were likely exposed to the chemical ingredients that damage parts of the brain that controlled language, memory, behavior, and emotion. Farm worker poisoning and illegal use of pesticides is commonplace in our State.

And because our people are so poor, because the color of our skin is dark, because we often don't speak the language, because we are not documented, because we face renewed threats of deportation, because farm workers are less likely to report these poisonings to local and State officials, the UFW must stand up today against the

further threats to health, safety, and lives.

Roundup has recently gained attention over the last several years for the increased association of the product and its ingredients known to cause cancer by the State.

Today, we are discussing labeling the same product as safe based on the level of just one of its ingredients. However, the report and studies done did not factor in our study the other ingredients in Roundup's recipe, which are known to the State to cause cancer.

Users spray Roundup. They don't just spray one ingredient of Roundup. Labeling a product as safe, when it is not known -- when it has not been properly studied will continue to expose Californians and farm workers to dangerous chemicals known, and possibly unknown to the State, to cause cancer.

This is reckless. The UFW requests you to use science responsibly by testing the product used by millions before determining what level of cancer-causing chemicals is safe. The UFW requests you don't turn a blind eye to the other ingredients. Recommending a label that is safe, when so much information about Roundup remains unknown, puts a significant risk to farm workers, who harvest our food, and to our communities and the families who use the product at home.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Okay. The next speaker, and probably the third time I'm not getting this name right, Stephen C. Frantz?

DR. FRANTZ: Frantz.

CHIEF DEPUTY DIRECTOR HIRSCH: Frantz. Okay. My apologies. And followed by Michelle -- Dr. Michelle Perro, and then after that Pedram Esfandiary.

DR. FRANTZ: Hi. I want to thank the California EPA for this opportunity to provide information and/or a new perspective regarding the recently proposed NSR -- NSLR[sic]. Unfortunately, coming this late, a lot of my stuff has already been said, so I'm going to have to edit as I go along.

But a concern I've had over the years is that as industrial agricultural applications of glyphosate has expanded, so has the contamination of food and water increased. And in response, the U.S. authorities have periodic -- periodically elevated the maximum allowable "safe" - put that in quotes - amount of glyphosate residue in what we eat and drink. In essence, these are pragmatic decisions to accommodate existing real-world residue levels of existing agricultural practices. This is not reliable science. It does not follow the precautionary

principle, and I just want to make sure that's observed.

Let's see, toxicity was one of my issues. Glyphosate doesn't follow the typical dose-response curve. It's not linear -- it's non-linear as are, you know, recognized for many endocrine disruptors.

And I think this was mentioned already, but Monsanto's own data they showed that about 30 percent of ingested glyphosate is retained in animals. The rest is excreted, but about one percent of it is retained. And I think Anthony mentioned this as it crosses the cell barrier and so on, that gets into our biology, which is a really tragic issue.

I mean, we're dealing with glycine. Glycine is very critical to our survival, and we don't mess with glycine. We just don't do that.

Let's see, I won't go through the -- how the toxicity occurs. Although, I should mention, to reemphasize this, that glyphosate does constantly circulate in the bloodstream. It's also in the lymphatic system, and the cerebral spinal fluid. And it circulates for about two weeks. I mean, it's a long time.

And so while you're -- while that's circulating, you're also gaining more doses as you eat more -- ingest more -- whether it's ingesting, drinking, inhaling, or vaccines. Vaccines have glyphosate too.

And I think it's really important again to under -- to emphasize that those malformed proteins that Anthony talked about, you know, that are excreted back out into the exocellular matrix, and -- but then they're participating in cell management communication, and in tissue structure.

This is crazy. I mean, this is -- I mean, for example, collagen will be utilized -- that collagen that comes out will be utilized in bone, skin, muscle, tendons, cartilage, teeth, whatever. But the integrity and functionality of it is now defective. And as Anthony mentioned also, I mean -- or consider other proteins that are coming out, such as digestive enzymes that can no longer function in breaking down food into nutrients that can be absorbed by our bodies. This negatively affects our biology at very funda -- at a very fundamental level.

Let's see. Well, this kind -- it just kind of reiterates what so many other people said. I mentioned about circulating for up to two weeks. And it's everywhere in our body, all tissues, organs, and bodily fluids. And how many different exposures are likely to occur in a day, a week, or a month? How large is this exposure? What is the frequency of such exposures? And how could one possibly regulate with any degree of accuracy their intake? It's virtually impossible to

protect oneself from this all-pervasive chemical.

I want to go to another issues, because it's kind of basic in how we review this. It's administrative and related to scientific problems. The cancer-related data that has been provided over the years by the EPA has recently been brought into question, because of parent collusion between Monsanto and certain individuals at the EPA all for the benefit of Monsanto.

Because of this apparent collusion, U.S. Congressman Ted Lieu recently issue a press release stating that consumers should -- quote, "Consumers should immediately stop using Roundup because the non-Hodgkin's lymphoma risk as determined by IARC".

And then his release also suggested that the Department of Justice investigation is warranted to look at any potential misconduct by employees at the EPA. A week ago, the EPA's Inspector General, part of the DOJ, requested the EPA OIG, Office of Investigations, quote, "Conduct an inquiry into several agency glyphosate review related matters". It's a big deal.

The entire relationship between Monsanto and the EPA appears to have been corrupt for many years. Therefore, the glyphosate regulatory decisions of the EPA over those years are certainly questionable, including the original registration of glyphosate and the ongoing

re-registration process.

Until the tainted administrative and scientific issues are properly sorted out, glyphosate should not be allowed on the market at any concentration, because the potential risks are and have been far too great.

Overall, glyphosate poses an unreasonable risk of adverse effects to humans, animals, and the environment. There is no quote, "safe level", end quote for glyphosate, and it should not be in our food supply, water, air, soil, or vaccines. It causes damage wherever it goes.

(Applause.)

DR. FRANTZ: Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Okay. Next speaker, I think, it's Michelle Perro?

DR. PERRO: Correct.

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Followed by -- and another name I'm probably not getting right -- Pedram Esfandiary, and followed by Bob McFarland.

DR. PERRO: Hi. Good afternoon. Thank you for having me. And I'm hoping I'm going to be able to pose some more concerns that I have than questions.

I'm an integrative pediatrician. I've been doing pediatrics for the past 36 years. I'm old and I'm actually a little tired. The reason why I'm tired is

because I take care of chronically ill kids. Kids are tough.

What I'm seeing now are sicker kids. One in two children have a chronic disease. The way -- the place where these diseases lurk are in immune dysfunction. Now, I know we're here to talk about carcinogenic aspects and the NSRL, but in children that's really hard to study, because cancer takes a long time to develop. You're not going to see any kids.

As a matter of fact, the rate of cancer in children has only slowly grown to -- and yes, it's the second leading cause of death. It's increased 50 percent in the past 40 years, but it's not very high right now.

But what is high are autoimmune diseases. And that is probably within the second -- within the 10 top leading cause of death in female children.

So what we're seeing now is Immune dysfunction in children based on gut dysfunction, which then leads to autoimmune disease, which is on the rise and I can give you those stats, which is the precursor to cancer. So to talk about cancer specifically is problematic for children. So that's my first point.

The reason -- the other problem is that glyphosate is -- it's a toxic substance. Some children will be able to clear it. Some can't. There are two

mechanisms for detoxification. One is your gut microbiome, and the second is your liver.

Now, we have two problems there. The gut microbiome is affected by glyphosate, because it's a mild antibiotic. We all know that Monsanto patented that in about 2002 as an antibiotic. We know that. That's basic knowledge.

And so what's problematic with the liver is that your liver is your second line of defense for detoxification. What Michael Antoniou and his group out of Kings College so eloquently showed, and you heard this study already mentioned, is that glyphosate in levels - and he used Roundup specifically - in levels of 0.1 parts per billion caused -- it wasn't correlated, it caused liver damage leading to nonalcoholic fatty liver disease, precursor to NASH non-alcoholic steatohepatitis, precursor to cirrhosis.

We know that in obese children, which affects right now 20 percent of American children, that group 30 percent now have non-alcoholic fatty liver disease. So we now have kids who have an impaired gut function called dysbiosis. We have children of secondary liver toxicity, secondary to glyphosate and whatever other chemical soup they're being exposed to, because we don't actually look at it. Some can handle the toxins and toxicants, some

cannot.

Who can and who cannot? It's unknown. It's not been studied. What the gut microbiome looks like in children not been studied. The effect of pesticides on this not been studied. We know that pesticides are now looking at antibiotics as pesticides. That's where it's going.

So how to determine what a safe level is is nearly impossible, because we don't know. And because we're all individual, it will not affect all children equally.

This formula that you placed, thank you so much, the NSRL formula ten to the fifth times 70 kilos, well that's for a 70 kilo adult male or female, and not a three kilo baby. So the formula doesn't pertain to children. So we have all sorts of problems with these formulations and the pediatric population.

So because I'm hoping you can help me with my clinical practice, you're invited to come with me to my office any day and see what I deal with. I see what you deal with here. This is -- you can keep this. I'll keep my clinic.

(Laughter.)

DR. PERRO: I need some help, because I have found that there's no safe level of glyphosate. You

should also know that I have learned to treat glyphosate poisoning. And I've been successfully abled it -- to clear it from children. And I actually do glyphosate testing using a lab. So I can test for it, I can treat it, I can clear it, and kids get better.

What's problematic is that this is not general knowledge. Most pediatricians don't do this or know about it. I've been doing this about -- for about decade, and I have a book coming out about it in November, where I wrote about it, because I'm so concerned about the state of our children's health.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you very much.

Okay. Next speaker, and feel free to correct my pronunciation here, Pedram Esfandiary from Baum, Hedlund, and -- sorry. Baum, Hedland Associates, followed by Bob McFarland and then Donna Farmer.

MR. ESFANDIARY: Thank you, Mr. Hirsch. You pronounced my name beautifully by the way. And I'm from an associate attorney at Baum, Hedlund, Aristei & Goldman. It's a Los Angeles based law firm. Thank you for the opportunity to make a statement regarding the issues for the proposed NSRL.

Firstly, the California Code of Regulations section 25703, which the Initial Statement of Reasons purports to follow, specifically requires appraisal of epidemiologic data in a quantitative assessment for a no significant risk level.

Although OEHHA relies upon a single animal bioassay as required by the statute, it fails to consider any epidemiological studies. This falls short of the statute's requirement that equality and suitability of available epidemiologic data be appraised.

Epidemiologic analysis would provide robust and comprehensive evaluation of a chemical which most users absorb via cutaneous and respirational contact. Because OEHHA has not accounted for an epidemiologic data, the proposed safe harbor does not conform to the requirements of the Code of Regulations for quantitative risk assessment and should be reconsidered accordingly.

Furthermore, it is questionable whether the proposed safe harbor has considered a sufficient number of animal bioassays. OEHHA reviewed a two-year rodent carcinogenicity study where 50 male CD-1 mice were fed a diet containing glyphosate at concentrations intended to achieve dose rates of 100 -- sorry 0, 100, 300, and 1000 milligrams of glyphosate per kilogram of body weight per day.

Tumor incidence was observed in the 1000 milligrams per day dose group. However, other studies have found the development of tumors at significantly lower doses, including Lankas in a 1981 study, where lymphocytic hyperplasia was observed at 11 milligrams per kilograms per day in Sprague-Dawley rats.

Wood et al. found lymphoid hyperplasia at low- and mid-doses in males at 71.4 and 234.2 milligrams per body weight per day, in a study where malignant lymphomas were also observed significantly induced at 110 milligrams per kilograms per day.

And Lankas again observed testicular interstitial tumors in male Sprague-Dawley rats, which demonstrated a significant trend and a significant pairwise comparison between control and the high dose of 31.49 mg per kilograms per day.

And Stout and Ruecker noted pancreatic islet cell adenoma in male Sprague-Dawley rats demonstrating a significant pairwise comparison relative to controls at the low dose 89 mg per kg per day in 1990.

Indeed, all of these studies were considered by the EPA's Scientific Advisory Panel, the SAP, charged with evaluating the 2016 EPA glyphosate issue paper.

Specifically, the 2009 study of Wood et al. were malignant lymphomas were observed in male rats using 810

milligrams per kilograms per day dose rate, achieved a clear dose response and was supported by findings in an additional 18-month study.

A significantly lower NSRL would thus be reached using the data from such studies, which found carcinogenesis and lymphogenesis at lower doses than the study considered by OEHHA in determining the safe harbor.

Moreover, the Initial Statement of Reasons does not propose how exemption from the Prop 65 requirement, based on the NSRL, would function in practice. Glyphosate is -- or Roundup rather, is used in a variety of different industries, by different applicators with varying exposure levels.

For example, it is not clear whether a particular user falls within the safe harbor if throughout the course of a week, they're exposed to varying levels, including 1100 micrograms, 2200 micrograms, and 3500 micrograms. It is not clear how such a high NSRL, which has been calculated absent consideration of any epidemiologic human adverse data, or a sufficient number of animal bioassays is reconcilable with a known fact that glyphosate is a human carcinogen as response by the IARC and known to the State of California.

The public would not be exposed to high levels of a cancerous chemical without more extensive investigation

and analysis by OEHHA of the available data in an effort to follow the requirements of the Code of Regulations.

Thank you for your time.

(Applause.)

CHIEF DEPUTY EXECUTIVE OFFICER HIRSCH: Okay. Thank you.

Next speaker Bob McFarland followed by Donna Farmer and James Bus.

MR. McFARLAND: Good afternoon. And thank you for this opportunity.

I understand that OEHHA is one of the most progressive and concerned regulatory agencies in the country, and we thank you for that.

I was very moved by listening to -- by the way, my name is Bob McFarland. I'm the president of the California Guild. The California Guild is one of the oldest agricultural organizations in the country. We incorporated in 1946, and we have over 5,000 members serving 80 communities across California.

I was very moved by the gentleman from the UFW who spoke about the workers out there in the fields, and their exposure to glyphosate. And I just have this terrible scene of them out there harvesting the food we eat while the owner is off in corporations sit in their living rooms watching the Giants/Dodgers game.

So I think we -- it's really -- we need to be very much aware of the people that come into physical contact with this herbicide.

I'd like to introduce today that there's more concerns than just health concerns regarding glyphosate. There's a movement across the globe to ban glyphosate from countries like the Netherlands, and Sri Lanka, and Colombia, Bermuda, Malta, Argentina, El Salvador, Germany, and France. And this will continue, because the studies that are being done and the evidence that is coming out about this harmful chemical is going to cause more countries to ban this.

That's going to affect the economic health of farmers in California, because they cannot export their crops. So that's an important concern.

You heard the doctor talk about liver disease. Well, I just happened to be a victim of nonalcoholic liver disease. And I have never been a drinker. My doctors asks me this -- my doctors ask me that. I've been through two or three years of batteries of tests to try to determine the cause of my liver disease. I've never had hepatitis, and they are baffled as to the cause of this disease, but I've recently been told by a doctor that it's more than likely glyphosate.

And thank goodness if it can be determined to be

glyphosate, there is treatment. So we have a responsibility to the public and people that have this terrible disease to educate them, that their livers may be being destroyed by glyphosates.

It's funny that we've reached a point where our species has -- supposedly the most advanced species has come to a point where we accept certain capacities of poisons in our food and in our water.

I don't know if we're the most highly evolved species. You know, there's studies that show that animals can tell foods that are contaminated by glyphosates and other contaminants, and foods that are fresh and uncontaminated, and they eat the uncontaminated stuff. So you tell me, are we the most highly evolved species? I don't know. I've got a question about that.

So, you know, you have an impossible task, an impossible task to determine what amount of poison will be allowed in our water and our food supply. And I have great sympathy for you, because I've got to believe that if you're -- if you're mothers and fathers, if you're citizens, if you care about our children, if you care about future generations, the only real answer is no level of glyphosate in our food and water.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker is Donna Farmer, Monsanto, followed by James Bus and Trenton Norris.

DR. FARMER: Good afternoon. My name is Donna Farmer, and I'm a senior toxicologist at Monsanto's Regulatory Product Safety Center. I've spent 25 years looking at the safety of herbicides, specifically glyphosate for 20 years. And I'm fully confident in the safety of glyphosate.

Glyphosate and glyphosate-based herbicides have a history of more than 40 years of safe use around the world, and are supported by one of the most extensive worldwide human health and environmental effects databases ever compiled for a pesticide product, including seven complete regulatory data packages representing hundreds of studies.

These regulatory required data packages have been developed by different registrants, in different testing facilities, from different regions around the world over decades.

Regarding carcinogenicity, regulatory agencies whose job it is to approve and regulate pesticides have reviewed and re-reviewed over those past 40 years the rat and mouse carcinogenicity studies and have consistently concluded, based on a weight-of-evidence analysis, of all

the data published and unpublished, including epidemiology, and genotoxicity, and rodent carcinogenicity studies that glyphosate does not pose a carcinogenic hazard to humans.

The outlier on this issue is IARC, a working group of which concluded glyphosate is a probable human carcinogen. Solely based on this determination, OEHHA proposed a ministerial listing of glyphosate under Proposition 65. The IARC working group did not make its conclusion based on sufficient evidence in human studies. Instead, it based its conclusion of sufficient evidence on four animal studies in rodents which OEHHA found to meet the criteria of the regulations.

To be clear, no regular agency in the world considers glyphosate to be a human carcinogen. Nearly two dozen regulatory and scientific bodies, which various reviewed the same four animal studies that the IARC working group reviewed, reached the opposite conclusion, that the tumors were not related to treatment, and glyphosate is not shown to be carcinogenic.

These include OEHHA in its own independent review of the data in 2007, as well as the U.S. Environmental Protection Agency in September of 2016.

Finding none of the tumors in 15 different animal studies are related to the administration of glyphosate

and concluding that glyphosate should be classified as not likely to be carcinogenic to humans.

Similarly, no less than nine additional regulatory agencies across the globe have conducted assessments after the IARC determination and included the IARC monograph in their reviews. These post-IARC reviews are from Australia, Canada, three from the European Union, Korea, the WHO, JMPR, New Zealand, and Japan.

The conclusions of these agencies' reviews are consistent with those recent and previous conclusions by the U.S. EPA, as well as those of regulator -- of regulatory authorities and international bodies around the world over the 40-year history of glyphosate.

Now, glyphosate is not genotoxic, does not produce tumors in animals, or any cancer including non-Hodgkin's lymphoma in humans.

Therefore, OEHHA's reliance on male mouse hemangiosarcomas, as identified by IARC, is not justified for derivation of a NSRL regulatory value.

And Dr. James Bus will discuss this further. And Mr. Trent Norris will provide reasons why OEHHA has the authority to establish an infinite NSRL.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

The next speaker James Bus from Exponent followed

by Trenton Norris, and Deborah Whitman.

DR. BUS: Good afternoon. My name is James Bus, and I am a Board Certified toxicologist with the consulting firm Exponent. I'm here today representing the Monsanto Company, and am commenting that OEHHA's reliance on male mouse hemangiosarcomas, as identified by IARC, is not justified for the derivation of an NSRL for the following reasons:

First, a JMPR review concluded that hemangiosarcomas were not statistically significant by pairwise comparison, and the tumor response was well within the historical control incidence.

Second, although an IARC-conducted trend analysis identified hemangiosarcomas as statistically significant, Dr. Joseph Haseman in public comment to a December 2016 EPA Science Advisory Panel noted that only 11 positive tumor trends, including mouse hemangiosarcomas were observed across the nine rat and six mouse cancer studies evaluated by EPA, while approximately 29 positive trends were predicted by chance alone.

Third, in published analysis Dr. Robert Tarone has observed that IARC importantly failed to note that hemangiosarcomas were not replicated in the other mouse study IARC considered, which was further confirmed by EPA in its recent draft analysis of six mouse and eight rat

cancer bioassays.

Fourth, linear low dose response modeling for the NSRL derivation is, in part, based on IARC's conclusion of strong evidence of genotoxicity and oxidative stress. However, IARC did not consider extensive high-quality genotoxicity data that led multiple regulatory agencies, including OEHHA, to conclude that glyphosate is not genotoxic. I have published the conclusion that IARC also did not follow its own working group recommendations in assess -- in its assessment of oxidative stress, and that the studies cited by IARC do not plausibly support increased oxidative stress potential in humans.

Finally, other cancer endpoints identified by IARC cannot be used for an NSRL derivation, and that those endpoints, like hemangiosarcomas, were not replicated across multiple rat and mouse bioassays, and thus are inconsistent with glyphosate-induced animal carcinogenicity.

In conclusion, an NSRL based on male mouse hemangiosarcomas is not justified. As stated by Dr. Tarone, the IARC analysis represents a quote, "Flawed and incomplete summary of the experimental evidence", closed quote.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Thank you.

Trenton Norris, Arnold & Porter Kaye Scholer, LLP for Monsanto, next -- and followed by Deborah Whitman and Harvey Makishima.

MR. NORRIS: Thank you. I'm Trent Norris a partner at Arnold & Porter Kaye Scholer an outside counsel to Monsanto Company on Prop 65 matters.

As you've heard from two of Monsanto's scientists, this scientific evidence demonstrates that glyphosate does not cause cancer either in humans or in animals. This means that exposure to glyphosate at any level poses quote, "No significant risk", closed quote, of cancer to humans.

In other words, the NSRL should be infinite. OEHHA has the authority to establish an infinite NSRL. Indeed, that's the appropriate approach where a chemical technically meets the requirements for listing, but the scientific evidence does not support a finding that the chemical actually causes cancer in humans.

Monsanto, of course, does not agree that glyphosate is subject to listing under Proposition 65, and is challenging OEHHA's proposed listing in court on numerous Constitutional grounds.

But to the extent that OEHHA does decide to proceed to list glyphosate, the NSRL should be infinite, because the scientific evidence shows that glyphosate does

not causes cancer in humans at any level.

The case that compels this result is Baxter Healthcare Corporation versus Denton, which was decided by the Third District Court of Appeal here in Sacramento in 2004.

In that case, a medical device manufacturer sued OEHHA for a declaratory judgment that there is no significant risk of cancer to humans from DEHP, a chemical used in plastic products. Unlike with glyphosate, in that case, it was undisputed that DEHP does cause cancer in rats and mice.

Baxter argued, however, that DEHP could not cause cancer in humans. The trial court and the court of appeal agreed with Baxter. The courts explained that even though DEHP was properly listed under Proposition 65, based on sufficient evidence of carcinogenicity in experimental animals, the weight of the scientific evidence supported Baxter's argument that DEHP could not cause cancer in humans.

In reaching that conclusion, the courts emphasized that evidence presented by OEHHA that DEHP may cause cancer in humans was not sufficient to set a numerical non-infinite NSRL where the weight of the scientific evidence suggested otherwise.

The courts thus concluded that DEHP, at any

level, poses no significant risk of cancer to humans and thus that the NSRL for DEHP should be infinite.

The case for an infinite NSRL for glyphosate is even stronger than it was in the Baxter case for DEHP. The weight of the scientific evidence demonstrates that glyphosate does not cause cancer in humans or in animals.

Furthermore, OEHHA itself has concluded that glyphosate is unlikely to pose a cancer hazard to humans, and OEHHA reached this conclusion based on the very same studies that the IARC reviewed. In these circumstances, the only appropriate action by OEHHA is to determine that the NSRL for glyphosate is infinite.

Under the Baxter precedent, OEHHA clearly has the authority to do this, if glyphosate is ultimately listed under Proposition 65.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Thanks.

Before we go on, I just want to check with our court reporter who's nodding he's okay.

All right. That's good.

(Laughter.)

CHIEF DEPUTY DIRECTOR HIRSCH: Yeah. Deborah Whitman, Environmental Voices followed by Harvey Makishima and William Brooks.

MS. WHITMAN: Hello. My name is Deborah Whitman.

And I'm the founder and president of a non-profit called Environmental Voices. And we educate people about toxic chemicals and how they affect our health and the environment.

We believe that glyphosate should be given a zero, no safe range, and should be banned in the State of California because it accumulates in the body, it's known to cause cancer, and there is no way to monitor the exposures in our food, our water, and the air.

Like millions of people, I suffer from severe multiple chemical sensitivities. I've been hospitalized twice in emergency by collecting samples of herbicides that were sprayed by the State of California at the Yolo Bypass levees.

So my question is what about the dogs that are running when they go down on that levee, how can you determine how those people have been exposed to those toxic chemicals? I was trying to get a sign put up to warn the public that it was dangerous there after a rain, and there was yellow foam all over that area. And so what about the birds that we're trying to protect in that Yolo Wildlife Refuge?

Also, I experienced my granddaughter's kindergarten class. I went there late and noticed that they were spraying Roundup on the grounds behind her

class. The person I spoke to that said he was spraying Roundup had been there for several days. Not only that, but the schools regularly spray Roundup and other herbicides routinely in the schools in the districts around Sacramento. And I don't know where else, but I know in Sacramento area.

So how can we determine the exposure that those children are getting when they're out playing on the grasses and in the garden area. So another thing that I experienced, because I get very sick. Even if neighbors spray Roundup, I get headaches, I -- the back of my neck hurts. I get sick to my stomach that's how sensitive I am to those chemicals.

So when you go into Home Depot and these other stores, like Lowe's, where do you find Roundup and these other herbicides? Right at the registers. How can you determine the exposure that these people that are working there eight hours a day and exposed to that?

I can't stand in line for more than a couple of minutes to pay for items without getting sick.

So anyway, those are just some of the examples of the things that I experienced and why I started my non-profit. So we urge you to stand up against the chemical manufacturers and suppliers of glyphosate products and protect the people who reside in or visit the

State of California.

Thank you very much.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you. Next speaker Harvey Makishima representing, I think, several different groups. So the Guild and MAA. You can clarify that for us. And then followed by William Brooks and Kathleen Furey.

MR. MAKISHIMA: Hello. My name is Harvey Makishima, CEO of PAPHC, which stands for Public Awareness and Preventive Health Care. And also a member of the Guild and -- the Sacramento chapter, and I'm a mom, Moms Across America.

(Laughter.)

MR. MAKISHIMA: Anyways. My vision isn't really good, but on the first -- on our first --

(Thereupon an overhead presentation was presented as follows.)

MR. MAKISHIMA: -- chart, I wanted to just start with this one, because when OEHHA does get glyphosate on Prop 65's listing of carcinogens, I wanted to show how pervasive it is, not just in California, even though it's probably one of the worst, but also throughout the nation. Notice the dark area of the United States. All of these dark areas have the most amount of glyphosate applied.

And then notice in California, to the far left, how dark that area is in the Central Valley of California. This is -- this means to me that we're trapped. I mean, we've got this material, glyphosate, anywhere we turn. It's in the waters.

And let's go to number two.

--o0o--

MR. MAKISHIMA: This is an interesting agricultural -- well, it's almonds, and I love almonds, but they have -- it's a graphic showing a map of California where the almond industry uses the most GBH, or glyphosate-based herbicides in California, as of 2014.

During that year, 300 million pounds of GBH were sprayed in the U.S.A. California gets about 13 percent of that total, which is seven times more than others states on average.

Let's go to number three.

--o0o--

MR. MAKISHIMA: This table is from DPR, Department of Pesticide Regulation, and it's a Pesticide Use Report. And it goes from 2008 to 2013. Let's take a look at just one of those. And my vision isn't so good that it can see it, but there's one at a million three hundred -- a million -- 1.5 million. Is it higher up?

Okay. And a lot of these counties are spraying

and applying glyphosate just everywhere essentially. I mean, the parks, the sidewalks, you name it, it's being used unfortunately way too much for the children that are playing in these areas.

Let's go to number 4.

--o0o--

MR. MAKISHIMA: The next item is an article about the study of the USGS, United States Geological Survey, where there -- new research indicates that while the presence of some chemicals in streams has decreased over the last decade due to new regulatory restrictions, newly developed pesticides, such as geo -- neonicotinoids and glyphosate are now the biggest polluters of water.

Their findings indicate that about 90 percent of urban streams contain pesticide concentrations exceeding allowable levels for aquatic life compared to only 50 percent in the previous decade. So the extensive use of it has increased, and we're having to live with it unfortunately.

Let's move to number five before my time runs out.

--o0o--

MR. MAKISHIMA: This is a sample of the USGS survey in California. And as you can scroll down slowly, you can see that the numbers of areas and the counties

that have these levels of glyphosate is just about everywhere, I mean, extensively throughout California. These are in our surface waters, which I understand, of course, is going to be our source of drinking water.

Now, as a California citizen, I'd have to object to any level. I'd have to go with zero, because I don't want to drink that -- that type of water.

And I thank you very much.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker, William Brooks with the Guild followed by Kathleen Furey and Leo Younger.

MR. BROOKS: Hello. My name is William Brooks. I'm with the Guild. I'm an engineer. Thank you OEHHA for having this. Your group is tasked with the protection of the environment, so I want to carry on with the water and the environment. And I want to say that glyphosate herbicide formulations with their additives and associated metabolites contaminate and harm all facets of our ecosystem including the water non-target plants, aquatic organisms, amphibians, fish, reptiles invertebrates, other animals, and soil biology.

In my handout, I have peer-reviewed independent studies showing such things as fish reproductive problems, early stage embryo mortalities, and premature hatching,

death rates of up to 86 percent in juvenile amphibians, major loss of species, even in cases less than 1000 micrograms per liter.

In fact, two species of tadpoles were totally eliminated with the implied increase in mosquitoes and West Nile Virus. Other papers showed an application-proportional increase in lyme disease due to tick increase from lizard eradication plus impaired honey bee colony performance and decline in monarch butterflies.

Harvey covered the USGS report that shows it's now prevalent in all our soil, surface, and groundwaters. And a number of studies have shown that these toxic chemicals persist in the environment for 60 days in pond water, and more than a year in pond sediment with half-lifes of up to 22 years in soils.

It contaminates our drinking water via surface runoff, leaching into groundwater, thereby adding drinking water, bathing, and washing water as possible routine exposure pathways. Monsanto have been aware of the carcinogenic nature of their product for 35 years. I have papers from the IPA that actually -- from them that show this.

In 2015, Monsanto failed to reveal eight papers with statistically significant tumor increases to the EU scientists determining legal levels in drinking water.

Based on limited information, the EU still set an EU level of 0.05 micrograms, while the U.S. allows a staggering 700 micrograms.

Before my summary, I just have two points of relevance. A federal judge in the Prop 65 case unsealed court documents indicating Monsanto had lobbied officials at the FDA to kill any inquiries into safety. Court papers also revealed that in 2015 Monsanto executive William Heydens emailed his staff to go throw out safety reports. And he would quote just get them to -- pay them to sign their names. Other court released emails confirmed this collusion with certain universities.

In light of the fact, I would like to know more about the research on how the proposed NSRL level was determined, with only one other chemical on the long CA list with a higher level than proposed. It does not look like the quantitative risk assessment has been followed correctly. Plus, there's nothing to account for long-term endocrine disruption and bioaccumulation. It looks like a flawed assessment.

When is somebody going to ignore the Monsanto lobbyists and the Monsanto manufactured safety reports and introduce precautionary safety levels to protect the environment and the people -- and the health of the people of California.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker Kathleen Furey.

MS. FUREY: Furey.

CHIEF DEPUTY DIRECTOR HIRSCH: Furey. Okay. I though it was one of the two -- followed by Leo Younger, and Jessica Denning.

(Thereupon an overhead presentation was presented as follows.)

MS. FUREY: Yes, please.

Thank you very, very much for having this hearing. And thank you all for being here today to witness a very important thing for our species to be able to deal with this very difficult chemical.

I did not know how to wrap my head around what one part per trillion is.

Can you?

Raise your hand if you can wrap your head around it?

Thank you. All right. So I'm going to help you here. One drop of ink into 20 -- one part per trillion. One drop of ink into 20 Olympic-sized swimming pools is the concentration which is the level that's stimulated the proliferation of breast cancer cells in vitro.

Thongprangisang, et al. 2013, that I can't pronounce it. This is astounding. And it's very shocking. It is so low. Our body is the size of 20 Olympic-sized swimming pools. So that is minuscule beyond minuscule.

And I would just like to -- I'm from the California Guild, and I would just like to read a statement from Stephanie Seneff. Dr. Stephanie Seneff has authorized the California Guild to share, for the purposes of the June 7th hearing today, the powerful information provided to her from Dr. Anthony Samsel who spoke already today confirming Monsanto's withholding of critical scientific evidence of glyphosate's toxicity to animals and humans.

Anthony Samsel, through the Freedom of Information Act obtained tens of thousands of pages of secret Monsanto documents supposedly proving glyphosate is nontoxic to humans, mostly done before the 1970s when glyphosate got approved. He was forced to sign an agreement stating that he would not show these documents to anyone else.

Its's daunting. It's a daunting task. Looking through these unsearchable documents, but Anthony has found some that clearly show toxicity, but were buried and labeled quote, "secret", end quote.

He has published some of this information in our papers. A key trick is to swap in historical controls to drum up more instances of cancer in the control group. These controls date back from the time when DDT was widespread, and probably got more cancer because of or -- because of that, or some other toxic chemicals that have since been banned like PCBs.

Monsanto also did a study where they radiolabeled glyphosate and then traced the radiolabel in various tissues. They found the highest levels in the bone marrow. I think it preferentially accumulates in cells that proliferate, because it's taken up actively along amino acid transporters, and glyphosate is an amino acid, and it has been demonstrated in re -- in a recent study that this happens. Proliferating cells have a high demand for amino acids.

To conclude, they found significant levels of radiolabel in the muscle tissues which did not show up as glyphosate in the standard glyphosate test. They hypothesized that it was bound to the protein, and therefore remained hidden and undetected. I suspect it was actually embedded within the proteins, because it substitutes for glycine during protein synthesis. I think this is its main mechanism of toxicity.

Although, carrying around toxic metals and

dropping them off in acidic environments is also a nasty thing that it does. This is signed by Stephanie Seneff, Senior Research Scientist, MIT Computer Science and Artificial Intelligence Laboratory.

And thank you. Thank you so much for the hearing.

(Applause.).

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you very much.

Next speaker Leo Younger with the California Guild, followed by Jessica Denning and Jessica Elkow.

MR. YOUNGER: Okay. Well, I'm a telecom tech, and I'm not a scientist. My interest in this is just as an organic consumer, so I defer my time to those who agree with me that zero is the appropriate amount for glyphosate in California.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

So next speaker Jessica Denning from the California Guild and followed by Jessica Elkow and John, I'm going to say, Diaz.

MS. DENNING: So I am a science teacher retired of middle school kids and a momma grandma and grandma, and we have an organic farm. I have a love a food and of healthy families and family stories.

Now, now in my great -- in my grandparent's day one in 20 people got cancer, one in 20. Now, look to either side of you to find two men, one of those two -- one out of two men is going to get -- one -- children, one out of two. It may be more by the time they grow up.

And look to either side of you at the women in here. One out of three women get cancer, and of our children will probably be more.

So this glyphosate has this glycine which is a building block of an amino acid, and it substitutes in and it changes the action of our enzymes that digest. They give commands to our body. And how do you find the causes of cancer? Well, there's so many ways. One way is to look at the -- you did the pictures.

The pictures. The pictures.

Where in California the farming is that spring and the almond orchards and down below that in the cotton fields. And then look at, say for instance, thyroid cancer, think of the farm workers that go in there to work -- because we're now burning down our crops with glyphosate four days before harvest. We spray our food -- spray our food with weed killer. It's called the death harvest, and it's real nice and dry, and easy for farmers, and then we eat it. And the farmers go in and harvest.

Well, in Central America, in Guatemala, one out

of four of the farm workers is dying of kidney failure. And in El Salvador and Sri Lanka have 20,000 people that died from kidney failure and 400,000 that have it. And they banned it. Monsanto sued them that they couldn't ban it. They couldn't prove it causes kidney failure.

So anyway, when we see all of the farm workers coming in on the southern border, I don't say build a fence. I say ban glyphosate, because what are the widows and orphans going to do when their husbands and their fathers are dead?

So, listen I'm 73, and I love family stories, but I am also historian for my high school class 700 members. And I'm surrounded by guys that went to Vietnam and women and even the children and grandchildren of veterans who have cancers from Agent Orange, which Monsanto told us was safe.

I look at Anniston, Alabama where for decades Monsanto claimed PCBs were safe, and they dumped them in the river. And all those people that -- they spent millions of dollars. It's pollute into lawsuit. So do we want to keep polluting or we just want to get rid of this chemical?

Now, we have a choice here. We can label it. We're only asking to have a label. So when you have an apple, you know if it's got that much glyphosate in it.

If a person can't afford anything, it' better than starving, eat something with Roundup. But if you have a choice, and you can afford to buy food for your family without weed killer, then it's labeled. And we just ask for an honest label.

And I say ten parts per quadrillion, because at a part per trillion, you've got breast cell proliferation, and then you have to consider that it's multiplied by risk factors. Dr. Perro talked about the children, and the fact that we have no testing for the mixture. And the mixture is a thousand times more toxic than the individual chemical, because the adjuvants, the detergents that go in to get that Roundup to soak in, also soak into the experimental animals, and the people, and the plants.

You cannot kill a plant with Roundup in sterile soil. Roundup was patented as an antibiotic. We have a patent number on it. And it preferentially kills the good germs, and it leaves salmonella, staph, C. difficile, and fungi. Those overtake the plant and kill it. So you have sickly plants, you're eating sickly food.

And the second way Roundup was patented was to get the chemical scale out of -- the mineral scale out of pipes. So it chelates, it grabs the manganese, the magnesium, the copper, the zinc, things are vital for the growing children's bodies, vital for the soil, vital for

the plants. It makes them unavailable. If it doesn't have minerals, because it's had too much Roundup, it just sits there and it doesn't degrade. That's why we have Roundup sitting around.

My time is up. Okay. That's it.

(Applause.)

CHIEF DEPUTY EXECUTIVE OFFICER HIRSCH: Thank you.

Next speaker, Jessica Elkow, and then followed by John Diaz and Joan Blaxter.

MS. ELKOW: Good afternoon. My name is Jessica Elkow. And I'm here as a mother and as an educator. I'm passionate about raising healthy children and building healthy communities, and I'm excited to see so many of you here today also share that passion.

I came today to voice my concern for any levels of glyphosate above zero. There's an obvious growing base of scientific evidence showing dangers, including some of the studies already shared here today, such as the one mentioned demonstrating causation between glyphosate and liver disease. And in that study, the exposure to glyphosate was at far lower levels than the proposed 1100 micrograms.

I also wanted to share one other piece of evidence of a lake here in California called Lake Mathews.

This picture shows where glyphosate was applied, and I have evidence here of the dates of application and the amounts of application.

Not long after that application, there was a huge problem with toxic algae. And in response to that, there was then a large application of copper sulfate to treat the toxic algae. And I just wanted to present this as an example of how there can be secondary problems related to glyphosate's use. For example, copper sulfate can cause problems in our own bodies and in those of other animals, because the copper's presence can inhibit the absorption of other important elements like zinc, which could be one of the reasons why we are seeing fertility problems, because it can inhibit male sperm.

I thank you for considering the science here today, and I implore you to use your position to protect the health of Californians and of our children.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you. Next speaker -- and this is more of a handwriting issue. I'm not quite -- I think it's John Diaz, but --

MR. DIAZ: That is correct.

CHIEF DEPUTY DIRECTOR HIRSCH: It is. Okay. Great. John Diaz, and then followed by Joan Blaxter and

Timothy Litzenburg.

MR. DIAZ: Hi. My name is John Diaz. I've been an advocate for labelgmos.org. Dam, this is a highly political issue. I want to urge you to have strength from the review of ethics in addition to the science. The practice of burn down on grains, and fruits, and vegetables adds to an impossible toxic burden.

In parts per billions, two parts per billions I've read, I've seen studies to where damage is shown, DNA damage. So I would like you to have a -- to think about this practice of burn down, where we're using glyphosate to dry crops in the field just so they can add a few more poundage to their yield.

Okay. Now, I think you can lead by example, and I urge you to have strength, and I pray for you to have strength in this issue. It's a highly political issue. I could go on and on. My colleagues have spoke. But this this -- if we lead by example, because they're spraying glyphosate where in parts per billions it could have a problem on -- it can affect our DNA. Our fruits, vegetables, it goes in the air. It's going into the water.

How -- this practice needs -- we cannot stop this practice. This Prop 65 isn't to stop burn down, but through your ruling, we could limit the amount by taking

the food producers that have chosen not to lead, but we need to step up. I've been an advocate, and we have gone to the public and shown -- we brought out the facts, okay? And we need government to step up and get out of this -- this -- this Presidential Panel on Cancer. They told us it was a billion dollar study, and they told us about the flaws with the studies. And they told us 85 percent of cancers -- cancer is avoidable if we just choose to -- to -- what we put into our bodies, but how can you choose when you're using this practice as burn down on everything that we eat?

Okay. This was supposed to be used on genetically engineered products. And now they're used on everything. If you look at the pharmaceutical companies, okay -- this is short -- when they use one medication for something that it wasn't used, and this is another instance, okay?

So I want to tell you just a fast little story. We've been out in the public. And we talk to women through Moms Across America, labelGMOs, get the message out about endocrine disruptors. And we have been out there, and when we talk to this issue about premature aging of our children through glyphosate, that -- their eyes get big as silver dollars, because they start pointing to their daughters and saying, like -- like, they

just can't believe what we're saying that their daughters -- because the kids, the children now can have sex. They're fully developed at like nine years old -- nine and ten years old. And the mothers are blowing out. And we have seen this.

So I urge you to have strength.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Doing a quick check-in with the court reporter.

You're okay.

Okay.

So next speaker, yes, Joan Blaxter from Weston Price FD, followed by Timothy Litzenburg and Michelle Ford.

MS. BLAXTER: Good afternoon. Joanie Blaxter. And I am the Ventura, California chapter leader for the Weston Price Foundation. The Weston Price Foundation is a national -- international actually nutrition education 501(c)(3) foundation. And similar to Zen Honeycutt who is here from Moms Across America, I speak daily with people who contact me for help around dietary choices, sources of clean food. And I can tell you that almost across the Board what I hear very consistently, especially from moms with sick kids is issues with the microbiome in the human

gut.

To me, this is so important, because we know that approximately 70 to 80 percent of our immune system receptor sites are located in the intestinal lining of our gut, and therefore the correct functioning of that immune system - and in parenthesis I have cancer - is directly dependent upon having the proper -- a healthy microbiome, that is to say the microbial community in the gut must be healthy for our immune system to be functioning appropriately.

This is the first time I've ever come to a public hearing. And as a person who directly not only writes and -- but speaks to people about the presence of neurotoxins in our environment, I have to say with all -- well, first of all, I want to thank the doctor first for the very clear presentation about how the determinants were made. Very, very helpful. As a member of the public, I want to appreciate you for that.

But I also have to say that I was a little shocked that the recommendations that are being made for an area as large as the State of California was a little surprising to me that basically there -- as far as I understand, it's based on one single study of a two-year study on mice.

To me, that is absolutely not enough. We are --

the reality is, is that there is no safe level of glyphosate exposure to humans, particularly babies. And the reason for that is simply because it bioaccumulates. We know that now.

We also know, and it's been referenced several times, that glyphosate increases the growth of breast cancer cells in parts per trillion. This chemical has been shown to be a neurotoxin, an endocrine disruptor, a mineral chelator, an antibiotic, and a carcinogen, which causes liver disease.

It's been found in our tap water, our children's urine, mother's breast milk, so in breast milk that is going to babies that are trying to build their bodies and brains, and also childhood vaccines. So once again, I just want to emphasize that no comprehensive independent study has ever been done that shows real life exposure.

I also want to say that it's interesting to me as a member of the public, and granted I'm -- I will hold up my hand here if I'm ignorant, but to notice that tumors are -- tumors and genetic disease are the two primary aspects upon which a determination of cancer is made. And we're not hearing anything about measuring levels of gut enteropathy. Gut enteropathy is highly, highly associated with the presence of cancer.

Gut enteropathy, for those who don't know, is

just simply the degeneration of the intestinal lining. And the reason this is so important is because that's where our immune system receptor sites are, as well as the microvilli, which are what we absorb our nutrients through. So when gut enteropathy is present, you basically die from malnutrition.

So just -- I also want to reference Stephanie Seneff again. As a senior researcher at MIT, she has shown an extremely significant Pearson Correlation Coefficient rate of 0.99 between the rise of autism in this country and the sales of autism.

Roundup, sorry.

And a coalition -- a coefficient rate like that happens virtually never in real-life situations. That is extremely significant.

As a patented antibiotic glyphosate has been shown to contribute to the creation of antibiotic-resistant super drugs -- excuse me, super bugs. And it also kills health-promoting bacteria in the human gut without which that immune system -- will -- cannot function.

So thank you so much for doing this public hearing and being willing to hear us.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you very much.

Okay. Next speaker is Timothy - it's either Littenburg[sic] or Litlenburg[sic] from the Miller firm.

MR. LITZENBURG: Litzenburg. That's probably a product of my handwriting.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Just to be followed by Michelle Ford and Bob Saunders.

MR. LITZENBURG: Thanks for the opportunity. I'm here today on behalf of more than 1500 people with non-Hodgkin's lymphoma after extensive use of Roundup. Over 100 of them are Californians, some of them are children.

I'm also here on behalf of, and in favor of, transparency and the ability to effectively regulate and I support you on that obviously.

I think it's important to note that while Monsanto executives have been heard today, and their attorneys, this is not the first time they've been heard by OEHHA on this issue. They've had closed door meetings in the past, so that they could speak to this agency about the safe harbor level.

And I would ask that that sort of meeting when it goes on, if you find it to be appropriate, that you make a

public notice of that sort of goings on as well, and that you give due chance to the other side. Maybe you could have a closed door meeting with oncologists or cancer patients on the subject.

(Applause.)

MR. LITZENBURG: The latter group, not having a $15 billion a year business understandably, doesn't have as much of a voice, but it's the government that can give them one.

I want to note also that the single-mouse study, the CD-1 study, that's being relied upon was done by a glyphosate producer, by a member of the Joint Glyphosate Task Force. And again, with many other people, the agency has yet to consider in this safe harbor calculation any formulated product studies. And as you've heard again and again, the degree of carcinogenicity is perceived to be vastly different with the formulated product.

I'll say again and reiterate what other people have said that I think from a public health standpoint at least, that it would be more appropriate to take a conservative approach and look at lower dose rodent studies. And they exist. The Lankas rat study has been mentioned. If it's public health, that's the endpoint here.

And then again, reiterating what many people have

said today, I don't understand why the agency is not considering epidemiology. I'm not terribly bright, that's why I went to law school, but --

(Laughter.)

MR. LITZENBURG: -- I know that epidemiology is what we use for causality in humans, and what we use for both hazard and risk assessment in humans. When we know something causes cancer, we don't -- it's unethical to do a clinical trial with humans.

There exists epidemiological studies. There's a meta-analysis which shows that overall the epidemiological studies are statistically significant. And they're also measuring real-world human exposure levels, which the mouse study is not.

Just close by saying California is not known for lagging behind history, and being on the wrong side of history. And I'd urge you to not do so here, and I would ask that the agency consider the source of the data, and the conclusions that are presented to it.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Thank you.

I've been advised that we should take about a 10-minute break, just to -- because it's standard protocol when meetings are being transcribed.

So we will start exactly at 3:45.

(Off record: 3:37 p.m.)

(Thereupon a recess was taken.)

(On record: 3:46 p.m.)

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. If you could take your seats, we're going to continue now starting with Michelle Ford, and then followed by Bob Saunders, and Emily Rooney.

MS. FORD: Hi there. My name is Michelle Ford. And I'm not a scientist, I'm not a doctor, I'm just a mom. And I have comments, but so many people have already touched on the comments that I have written up, that I'll just go ahead an email these comments along with the scientific resources.

But here's the thing, I woke up this morning -- I'm just going to speak from my heart. I woke up this morning to a picture of my friend Tiana, who now is dealing with cancer. Now, do we know whether or not it was glyphosate that caused her cancer? Of course, we don't know, because really we don't know what the safe levels of glyphosate are.

When I first started thinking about glyphosate, and our daily exposure to it, one of the first things I did is I went to my loaf of bread to see was glyphosate listed as an ingredient, and it's not.

I went to my eggs, is there glyphosate on my eggs? It's not listed.

I looked at the pasta. I looked at the sandwich meat, I looked at the fruits and the vegetables, there's no label that says whether or not I'm exposing myself and my family to glyphosate.

So, I honor you, I appreciate you, and I know that you've got a really tough job. But one of the wonderful things about having an agency and a body like yours is that you get to take a look at the health of our people, and you get to discern your observation, the observations of parents in the room that you're hearing from today, the observations of testimonies that you're going to get by email, and by fax, and you're going to get to realize that not all observations happen in a laboratory.

Many observations happen way after the fact. And to do your due diligence, I think it's important to really look at the facts. The facts are that we're sick. It shouldn't be acceptable that one in every two men is going to experience cancer. It shouldn't be acceptable that one out of every three women is going to experience cancer, and God only knows how many children.

It shouldn't be acceptable that we're living in a toxic environment where children are having to deal with

autoimmune issues. That's why you're here. You're here to protect the environment from chemicals. You're here to protect human beings, animals, water sources, and our air from toxic chemicals. That's your job.

And I know that you know that. And that's why I love you, because you're the last defense. You're the body of people that gets to determine our future in this regard.

And I'm all for business. I really am. I'm a small business owner. I'm here on my own dime, because I believe in this, but I believe in responsible business. And I don't think that we should look at, well, how much of a toxic chemical should be allowed? I think we should look at that we have the right to know what's toxic at all.

So, in my opinion, there is no toxic -- there is no level of toxic exposure that should be considered safe. So at the very -- at the very least, please rule -- I'm not sure what the language is, but please determine that there is no safe level of glyphosate for human beings.

And on behalf of my children and I, and on behalf of my friend Tiana, who doesn't even know that I'm mentioning her name here today, thank you for doing what you do. I know that it's a really hard job, but I'm counting on you to protect us the way that your job gives

you the authority to do.

Thank you so much.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you very much.

Okay. Bob Saunders followed by Emily Rooney and Bill Allayaud.

MR. SAUNDERS: Good afternoon. Thank you for this opportunity.

Instead of NSRLs, no significant risk level, we should be discussing glyphosate as NSFHC, not safe for human consumption. Fifty-five years ago, Rachel Carson sat before a congressional hearing in Washington D.C. and testified about the significant risks and dangers of heavily used pesticides, especially DDT.

As a result of her testimony, not only was DDT eventually banned, several other outcomes arose, including the eventual creation of the EPA. And here we are so many years later discussing an herbicide far more dangerous, more widely use -- and destructively used than the pesticide DDT. And we're scratching our heads in an attempt to determine the level of safety for something that so many valid tests have determined to be unsafe for human consumption.

Now, we know that the Monsanto doctrine, Monsanto

scientists, and others of their ilk have produced inside industry corporate science supporting the notion of the safety of glyphosate, often refuting the proven independent science of bioaccumulation, and sufficient facts and evidence of proof.

But then again, we must remember that Monsanto and their cronies are motivated by profit and greed not by solid science, honest facts and evidence, truth, or caring about the safety and health of our children and families. We citizens calling for a safe and sane environment are motivated only by caring and responsibility for the health and safety of our families and future generations.

I and many groups I work with call for an immediate ban of the use of glyphosate around schools, public parks, waterways, and more. Ten mile safety zones need to be created in order to protect our children and families. They eat and they play in those areas, and they're surrounded by this herbicide toxic soup.

Let us also protect our farm workers from glyphosate, for without them our tables would be empty. They risk far too much to feed us all.

However, rather than create extra paperwork, numerous meetings, years of wrangling over this or that level, and fighting the corporate behemoths like Monsanto, if we could just take the wise and great leap forward and

ban glyphosate entirely and soon, and join some of our foreign allies in their wise decision to do so for the health and safety of their citizens.

In the California, U.S.A. we should do no less. Our present and future generations will thank us. Physicians have take the Hippocratic Oath to first do no harm. I am guided by the spiritual code of tikkun olam to repair -- excuse me, to repair or heal the world. I and many other people invite you to join us. Our world, our environment is crying out for us to do so now.

Glyphosate is unsafe for human consumption. Zero tolerance is the only safe level. Let's get that done.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker Emily Rooney from the Ag Council of California, followed by Bill Allayaud and Joe Robichaud.

MS. ROONEY: Thank you for you time today. My name is Emily Rooney. I'm president of Agricultural Council of California. Ag Council is a -- an association representing approximately 15,000 farmers ranging from small farmer-owned businesses to some of the world's best known brands.

We will be submitting formal comments -- formal written comments after today's hearing, but I wanted to

offer some comments. I'm going to go in a little different direction than I normally do when I come to testify before this body. I'm going to talk a little bit about my personal background and my experience with California farmers, just to tell a little bit of the story of some of our practices.

My family has been in California agriculture for four generations. We have a family farm on my mom's side and a ranch on my father's side. That's been passed -- three of those four generations on my dad's ranch side have actually been passed through women. We take farming and ranching very seriously in our family.

I'm also a mother of a three-year old very healthy and active son Jake. And we go out to the ranch every weekend. And so I've witnessed first-hand the care that we take in our land, and in our animals, and in our crops to make sure we do things very safely, because my family lives out there. And if it's not safe for us, we know it's not safe for everybody else, but we feel very blessed to be able to live in this lifestyle, and we take good care of our environment, and our workers, and our families -- or our animals as well.

I've worked in State and federal policy for about 15 to 20 years. And I can also attest that California farmers lead the world in environmentally sound farming

practices, and we follow some of the strictest labor standards across the world.

And glyphosate is a very vital tool in those sustainable farming practices. Through the use of glyphosate, we've been able to reduce passes in the field with the tractors, and been a -- and therefore reduce emissions, and we've also been able to reduce soil erosion.

Glyphosate can and is being used safely. We are opposed to this listing. But if OEHHA is inclined to list, we support the proposed NSRL at 1100 micrograms. And like I said, we will be submitting more formal comments, but thank you for your time today.

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Thank you.

Next speaker, Bill Allayaud Environmental Working Group followed by Joe Robichaud and Mary Fraser.

MR. ALLAYAUD: I'm Bill Allayaud with the Environmental Working Group here in Sacramento. Thank you for the opportunity to speak.

First, I'd like to thank OEHHA for listing glyphosate under Prop 65. I think we're losing sight of that, that it -- I wouldn't say it takes courage to do it. You did the right thing, and Monsanto is suing because they don't like it. Understandable. It's their business model to sell as much as possible, and to reduce what they

see as regulatory burdens, while we think science should be used to protect consumers, the public, and the environment to the greatest extent feasible.

The levels set by E -- U.S. EPA, we think, are extremely high as acceptable. And they acknowledge that Americans are eating a huge amount of glysophate -- glyphosate in their diets. Their last assessment in 2012 estimated that American adults could be ingesting over five milligrams of glyphosate every day, five times more than what the State of California has defined as having no significant risk, and 50 times higher than the estimated one in a million risk of cancer.

Personally, I'd rather deal with one in a million, than 1 in 100,000, since so many people I know are getting cancer. It's kind of scary. When I was lobbying on the issue of BPA, which your DART Committee finally listed, I told people in the Capitol, we don't know what causes cancer exactly. It's rare that you say your exposure to asbestos or something like that.

But if you're lying in bed dying of prostate cancer or breast cancer and you're 50 or 60 years old, it might pass through your mind, like, what caused this? And you probably won't know.

So it's your job to help us defend us against all the chemicals that have been introduced into this society,

and that we are ingesting, breathing, drinking.

We are submitting written comments before the deadline. We're going to suggest a lower level than what you are, but we appreciate your work.

Thank you very much.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker Joe Robichaud. If I didn't quite get that right, let me know.

MR. ROBICHAUD: Robichaud.

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. And followed by Mary Fraser and Caroline Cox.

MR. ROBICHAUD: I'm here today -- my name is Joe Robichaud. I've been a resident of Sacramento for about the last 40 years. I'm here just to give my personal testimony. In the late seventies, probably through the eighties, I was an avid user of Roundup. I had a rental and my home. I used it all the time.

And I always took the Roundup precautions that they said if it was to come in contact with your skin wash it off right away and all that, and I followed that. Later on, I found out from a medical source that regardless whether you wash it off, it would permeate your body, and you would find the effects. Back then, I know several times I developed nausea. And I think on the

label it said that that would happen.

So I'm asking today why would they allow any amount of a toxic chemical like this, knowing its potentials, to be put in a chemical?

2010, I was diagnosed with non-hodgkin's lymphoma. Don't know how I contacted[sic] it. And my life quality, since that time, has totally degraded.

My last, what we call, is a PET scan is what I got, I'm in remission. But like I said, my life's -- I'm very -- I was always very active, a sportsman out there doing things, and my lifestyle has just really gone down.

So I'm asking you, everyday people, why would we have to wonder where we're at, what we're doing. Out in the field, I was an avid sportsman with my dog out in the grain fields. Why would we have to even consider thinking is -- am I going to come in contact with this chemical, you know what I mean? Why would we even -- if it -- we know any of its potentials even allow it. So I'm here today in opposition to the use of glyphosate. And like I said, that's just my personal testimony.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you very much.

Mary Fraser with Pesticide Free Zone followed by

Caroline Cox, and Nathan Donley.

MS. FRASER: Hi. Good afternoon. I'm a resident of Mill Valley, California. I'm a board member of the Pesticide Free Zone.

I think one of the things that your assessment ignores are children. You do an assessment based on a 70 kilogram person. I mean, how small is a fetus? How small is an unborn child?

Our children are being born pre-polluted. The Environmental Working Group did a study back in 2005, along with Commonweal. And what they -- they tested for 400 chemicals in the umbilical cord blood of newborns. They found 287 chemicals. So I ask you, how can you assess the synergistic effect of glyphosate with 287 chemicals that already exist in a newborn?

And the answer is you can't. You can't do that. Mathematically, that's impossible. So you can't make an accurate assessment of the health risks to a pre-polluted baby. You just can't. So I'm asking you to consider the health of our unborn children.

And when you did your assessment, you used a linear dose response. And glyphosate has been proven to be an endocrine disruptor. I know the EPA says it's not, but the Endocrine Society of America, which is a professional medical organization, has put out a position

paper that says that the EPA testing was inadequate, and that there needs to be new testing, and that we need to follow the precautionary principle. And I will be submitting that position paper from the Endocrine Society to you.

And when we look at public health, the latest statistics out of the CDC is that cancer is now peaking at the age of 25 to 40 years old. It used to peak at 70 to 75 years, because it's a latent disease, but now it's peaking at 20 to 25 -- I mean, 25 to 40 years.

And, wow, isn't it a coincidence that 25 years ago, GMOs entered the market, and GMOs are just a delivery system for pesticides and specifically Roundup.

So I ask you to take into consideration the health of our unborn children. And I also ask you to take into consideration the really new science, which is called epigenetic transgenerational effects. I recently saw a presentation by Dr. Tyrone Hayes that talked about this. And he showed slides of mice. He showed the grandmother mouse, who was exposed to a pesticide, showed no effect. He showed the mother mouse, who had no exposure, and showed no effect, and then there was the grandchild, and the grandchild was very deformed.

These are transgenerational epigenetic effects. This is new science. It's showing up in our studies

around DDT, which has been around a long time. And I really worry that this is what's going to happen with glyphosate. That in a couple of generations, we're going to find that there is no fertility anymore, and that our children are just totally deformed.

So please take into effect -- or account the health of our unborn children.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you very much. Next speaker is Caroline Cox, Center for Environmental Health followed by Nathan Donley, and Kathleen Kilpatrick.

MS. COX: My name is Caroline Cox, and I'm with the Center for Environmental Health in Oakland. I wanted to thank OEHHA for being a leader on the science on this, you know, clearly very important chemical that is not only controversial, but people feel very passionately about for, you know, really good reasons.

I also want to thank, you know, the whole State for its commitment to kind of being a lighthouse in terms of environmental protection in these stormy times. And I also wanted to remind OEHHA of something that I know you're very conscious of, that, you know, the regulations for the NSRLs require OEHHA to make use of the most

sensitive study.

And so I want to, you know, encourage to really think seriously about that, and I'm looking forward to submitting written comments.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker Nathan Donley from the Center for Biological Diversity, followed by Kathleen Kilpatrick, and Lucia Calderon.

DR. DONLEY: Great. Thank you. My name is Dr. Nathan Donley. I'm a former cancer researcher at Oregon Health and Sciences University. And I'm currently a senior scientist at the Center for Biological Diversity.

On behalf of our members and supporters across the country, I'm here in support of the agency's decision to list glyphosate on Prop 65 list of carcinogens.

The State has based this decision on the most comprehensive, transparent, and independent analysis of cancer causing effects of glyphosate done by the International Agency for Research on Cancer. The IARC is truly the gold standard when coming to a hazard classification of any chemical agent or activity.

And recent controversy around the agrochemical industry's undue influence and regulatory agencies in

Europe and the U.S., including on investigation just announced today by the EPA's Office of the Inspector General looking at possible collusion between Monsanto and the EPA on their glyphosate assessment, has made it that much more important that sound science is recognized and utilized in a way that informs regulatory decisions.

Science is built on transparency. And the agency has chosen the most transparent analysis of glyphosate done to date to base its decision on. I do have some serious concerns about the NSRL not being based on the most sensitive study of sufficient quality.

Instead of hashing out these issues here, we will be submitting detailed written comments identifying our concerns in detail. But something I do want to bring up now involves different exposure scenarios. So the NSRL is currently based on dietary exposure and absorption through the intestinal epithelium of the gut.

While this will likely be the major exposure scenario for those who don't use glyphosate, there will be farm workers, and home gardeners, and families that live in rural areas where spraying is common that will be exposed in ways above and beyond what they get through their diet.

This includes absorption through the dermal layer of the skin, through the pulmonary epithelium of the lung,

as well as ocular exposures. And these exposure routes can have very different absorption rates than that of the gut. And relying on toxicity studies that measure glyphosate exposure solely through the gut, there's a good possibility of the NSRL being under-protective to those who are exposed via different routes.

You know, these are obviously very complicated issues to address, I know, but it does not make them any less real or any less important.

There are communities in this State that have a much higher propensity for exposure. And historically, they have been completely ignored, because they differ significantly from the general population in one way or another. So I hope this agency will keep these communities in mind when finalizing the NSRL.

And to finish, I really just want to thank this agency for moving forwards -- for moving forward with plans to list glyphosate. You knew this was a politically charged issue. You knew it would be high profile. You knew there would be companies with deep pockets looking to tie this up in the courts, and you went forward anyway.

So from the bottom of my heart, thank you for the work that you do, and your willingness to follow the science, and make hard choices in order to educate and empower the residents of this State.

Thanks.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker Kathleen Kilpatrick representing Safety[sic], Safe Schools, and PVFTKFT Retirees Chapter, if I'm getting that right?

MS. KILPATRICK: SafeAg, Safe Schools, that's our local organization.

CHIEF DEPUTY DIRECTOR HIRSCH: Okay.

MR. KILPATRICK: Thank you. I'm a retired --

CHIEF DEPUTY DIRECTOR HIRSCH: And just -- just following Lucia Calderon, And Desirée Rojas, after you.

MS. KILPATRICK: Okay. I'm a retired nurse from the Pajaro Valley on the Central cost. And again, I also want to thank you for listing glyphosate on -- under Prop 65, and also for using the IARC recommendations, because they're based on probably risk, and not on the old fashioned risk versus benefit assessment.

I think we all applaud and support any decisions made using the precautionary principle, which looks for the option with the least harm.

I couldn't really decipher all those comparisons of the levels. And after all I've heard today, I have a lot more studies and numbers running around my brain. Although I did study toxicology and environmental exposure

assessment and occupational environmental health at the graduate level, it was 20 years ago. And as a school nurse in a farm-worker community, I had a lot to do while I was working at that job.

But I think we've heard a lot of reasons to choose the most conservative figure all the way down to zero. We know that Roundup is ubiquitous, and that there's been a dramatic rise in its use over the last 40 to 50 years about 100-fold. It's on the shelf of every hardware store. It's in our sewage. It's in every bottle of California wine.

It's certainly only one of many chemicals that our children, and particular our farm-worker children, are exposed to. I have to say it's not the one that concerns me the most, because you'll be -- we'll be back talking to you about chlorpyrifos I hope soon.

(Laughter.)

MS. KILPATRICK: But I think we all know that the long-term effects of these individual chemicals are still under exploration. We don't really know. We certainly don't know about the effects of their so-called inert ingredients, and we don't know how they work in combination. The goal of the Prop 65 designation, one goal at least, is to get people to think twice before they buy that bottle that's right there by the checkstand. And

before they put it on their lawn, their golf course, or on their school grounds, our school board, with our encouragement, has eliminated the use of Roundup. But unfortunately, they're understaffed and the weeds are growing because they don't really know what else they should do.

But we do want to raise consumer awareness and hopefully increase consumer pressure so that eventually sales will cease and use will cease. Our Governor and our California legislature have made a public decision to hold the line against the pushback from our newly elected federal designees who are rolling back our environmental protections against chemicals, against fossil fuels, and all the other assaults.

It's time for California to take the lead in moving away from chemically-dependent agriculture. The future of our children and of our planet depends on finding new solutions. And developing and exploring alternatives for weed control is a good place to start.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker is Lucia Calderon from Safe Ag Safe Schools, and followed by Desirée Rojas and Leni Felton.

MS. CALDERON: Good afternoon. First of all, I

want to just express my gratitude and appreciation for the work you're doing. My name is Lucia Calderon and I'm submitting comments on behalf of Safe Ag Safe Schools, along with a few other groups Non-Toxic Santa Cruz, Project Pollinate of Santa Cruz, and the Monterey Bay Central Labor Council.

Our organization is representing tens of thousands of Monterey and Santa Cruz County residents are deeply committed to protecting environmental and community health, particularly the health of agricultural workers and the families living and working near agricultural applications.

We support your proposal to adopt an NSRL for exposure to glyphosate under Prop 65. However, the proposed 1100 micrograms per day NSRL for glyphosate is not based on the most sensitive study of acceptable quality. We therefore request OEHHA revise the NSRL to be based off of a dose of 31.49 micrograms per kilogram per day, which is the level indicated by the best available science.

Included in the glyphosate analysis of the EPA's Cancer Assessment Review Committee are three high quality studies demonstrating that exposure to glyphosate below 1000 milligrams per kilogram per day leads to a statistically significant increase in the development of

certain cancers.

Wood et al. of 2009 found a statistically significant increase in malignant lymphoma at 810 milligrams per kilogram per day.

Stout and Ruecker of 1990 found a statistically significant increase in pancreatic islet cell adenomas in male rats at 89 milligrams per kilogram per day, and at 940 milligrams per kilogram per day.

The Lankas et al. study of 1981, mentioned earlier, found a statistically significant increase in testicular interstitial tumors in male rats at 31.49 milligrams per kilogram per day.

The State of California has taken an important step in listing glyphosate as a known human carcinogen. But the listing is only as effective as the NSRL will allow. We must ensure that people will not potentially be exposed to levels of glyphosate that can cause them harm.

Our organization strongly urge OEHHA to base the glyphosate NSRL off of a value of 31.49 milligrams per kilogram per day, the level based off of the most sensitive study.

And lastly, as the organizer of Safe Schools, which is a community coalition concerned primarily about the health impacts of chronic and cumulative pesticide exposure on the health of families and children living,

working, and attending school near fields. I want to reiterate that the 70 kilogram weight used in the NSRL calculation doesn't take into account child exposure, and continues to leave one of our most vulnerable populations at risk of cancer and many other health harms.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker Desirée Rojas from the Labor Council for Latin American Advancement, and Assembly District 4.

Okay. Well, then the next speaker Leni -- oh, I'm sorry.

MS. FELTON: I'm the next speaker.

CHIEF DEPUTY DIRECTOR HIRSCH: You're -- okay. That's what I thought.

Leni Felton, the Way of Health, private biz. And following that will be Sharon Larsen and Diana Rudé.

MS. FELTON: Okay. Thank you very much for having this hearing today.

Thank you very much for having this hearing today, and for opening to all the information you're receiving. I'm a clinical nutritionist. I work with people with chronic health issues.

I've seen so many people that wouldn't even be able to sit here today and go through a full four hours of

discussion, either because their children are disrupted their -- because of their behavior or because of their own health being so poor.

I've also just had the benefit of seeing a very long life. My mother just died at 99 -- 99 years of health. But on the other hand, I work with these very sick children. And I know that anything that's going to disrupt the major organs of elimination of the body, especially the liver, is going to have a huge impact on the health of the child throughout their years. And then when they get into their teens, even their own hormonal changes in cycles will be too difficult for them to handle.

So I encourage you to please listen to the information. If it wasn't an issue, we wouldn't all be here. We're all here because of the importance of this issue. I know that you've been presented with some information saying that it should be an infinite limit, and that there's -- there's no carcinogenic or any other factor. If that was true, we wouldn't be here.

But what we need to understand is that there is an aspect that has been spoken about over and over about bioaccumulation. And the fact is it's very hard to limit. Once you open the door, it's very hard to limit what is going to start being sequestered in a person's body.

Again, I thank you. I thank everyone here who has taken the time to give this information. And when I came in here, I drove up 80 -- Highway 5, and saw the signs in the middle of town saying Field or Farm to Fork. I think it said Field to Fork or Farm to Fork. And that really sums up why we're here today. It's a very specific and a very significant issue, and I hope that your findings will be that no level is safe.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker is Sharon Larsen from Moms Across America to be followed -- by -- I'm sorry. I'm really going to -- I don't -- Diana --

MS. RUDÉ: Rudé.

CHIEF DEPUTY DIRECTOR HIRSCH: Rudé. Okay. Thank you. And after her Cynthia Corey.

MS. LARSEN: Hi. I'm Sharon Larsen. I live in Citrus Heights. I got involved in this issue because my grandchild doesn't look like this. She can't sit up. She can't hold her head up. She can't stand up. She can't --

She has cerebral palsy -- low tone cerebral palsy, which means that she can't really chew food or swallow without aspirating food. Consequently, she became very, very thin and emaciated. Her pediatrician said that

she needed to have a G-tube.

If you don't know what that is, it's a tube that goes into your stomach where you're fed fluids. The fluid that she is still being fed, because her mom and dad don't really understand about glyphosates, as most people don't understand, a small percentage of people in this country seem to even know anything about it or understand the word.

The reason I'm here is because she was prescribed PediaSure. It comes in a can. Moms Across America did their own testing of this product and found that it was very high in glyphosates. I'm not a scientist, but I know that it's -- I'm sorry to say it this way, but it was either 1500 or 15,000 times stronger than what's allowed in the water in France and Germany.

I believe that it's that way, because it's made from corn and soy that is grown by Monsanto and sprayed with Roundup. This product is given to all vulnerable children that are not able to eat, and also to sick adults that have to be fed through a G-tube or have to drink fluid because they're really ill, and they're in the hospital, they're elderly, they have cancer.

This product, and other products like it, there needs to be no glyphosate. We had no idea that that was in what my granddaughter was being fed, until I just

started researching the nutritional value, and found the study that had been done by Moms Across America.

So I believe there should be no glyphosates. There's No label on this product that's being fed to children. And since then, I found out it's also in formula and many other products that most parents have no idea what they're feeding their children or their grandchildren or their sick relatives.

So I hope and pray for your help in banning this product, especially in products for children. And if it's not banned, labeling it so people at least know that they're poisoning their children.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Thank you.

Next speaker, on now, Diana Rudé from the California Guild, followed by Cynthia Corey and Joseph Robibias.

MS. RUDÉ: Thank you. Diana Rudé from the California Guild. I also wanted to commend OEHHA for moving forward with this listing of glyphosate.

The Detox Project tests food products for organizations such as Food Democracy Now, and Organic Consumers Association.

I was told today that Dave Murphy of Food

Democracy Now was going to be here today, and wanted to speak, but he could not make it with a -- due to a conflict.

The Detox Project notes that glyphosate residues are rarely tested for in final food products by any regulators or companies worldwide, including the high glyphosate-resistant crops of soybean, which about 90 percent are genetically modified, and maize about 70 percent.

The Detox Project recommends that methods for clinical testing, including glyphosate testing, should always have minimum limits of detection of 0.5 parts per billion or lower, and we advocate for much lower, for urine and water testing.

They claim that chromatography tandem-mass spectrometry -- I can't say that -- testing methods are the most responsible methods that should be used for this testing of urine, water, or food for glyphosate.

According to The Detox Project, the current no significant risk level being proposed here would not result in labeling of any of the numerous foods that have been identified to date to complain -- to contain glyphosate by the Detox Project.

The other thing I just wanted to mention is related to the gut microbiome. It has been mentioned

before in other testimony today, but I just wanted to mention a finding by Keith Bell. He's a citizen scientist. And he says that gut micro -- microbiome make or break amino acids and prepare them for absorption.

Keith Bell notes that gut microbiomes also regulate how amino acids cross the blood/brain barrier affecting mental and emotional health. According to Keith Bell, Roundup shuts down amino acid synthesis in bacteria intended to kill weeds because the same pathway for amino acid synthesis, the Shikimate Pathway - and excuse me if I'm pronouncing it wrong -- is used by plants.

Although when glyphosate was first placed on the market, scientists weren't factoring in the collateral damage of Roundup to soil and gut bacteria, because microbes that were -- weren't receive -- weren't viewed at that time as crucial to public health. We know more now, and we need to respond to this new knowledge today.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Okay. Next speaker Cynthia Corey from the California Farm Bureau followed by -- and you'll have to correct me when it's your turn -- Joseph Robibias and then Susan Lee.

MS. COREY: Good afternoon. Cynthia Corey with

the California Farm Bureau. I don't know if everyone is familiar with the Farm Bureau. I know a lot of people think it's a State organization, because it's an old word, but we're the largest nonprofit and oldest general farm organization in California.

We have a lot of policies, and I've worked with the Farm Bureau for 27 years in doing a lot of the environmental issues. What's very important to the members of our -- the California Farm Bureau, which are farmers and ranchers, is that if we do use chemicals that we use them very, very carefully, and judiciously. That's very important to our membership.

The Farm Bureau does not agree with the listing of glyphosate under Prop 65. Glyphosate, as was mentioned earlier, is a very important tool in conservation tillage. It allows us to reduce our tractor passes. And why that's important is you're using less diesel, which means you have cleaner air, you're able to sequester carbon, because you're not disturbing the soil.

So these are important for the environment, and so there's a lot of co-benefits, and we can -- we'll go into that more at length in our comments.

We know that nearly two dozen regulatory and scientific bodies internationally reviewed the same four animal studies that IARC, the working group, and they

reached the opposite conclusion, which is that glyphosate is not shown to be carcinogenic.

Given that OEHHA has changed their mind since their 2007 review, and now proposes listing, we only ask that the NSRL be absolutely no lower than the 1100 micrograms per day that's proposed.

We do not agree that it be listed. But if you're going to do it regardless of the scientific weight against this decision, then a fair NSRL is important, so that we don't -- aren't preventing from using an effective tool for agricultural production, and instead are faced with frivolous lawsuits.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Thank you.

Joseph Robibias -- and again feel free to correct me -- followed by Susan Lee and Robert Gipson.

Okay. Well, I -- Joseph?

Okay. Joseph from Folsom. Okay. Well, I guess you won't correct me then.

So the next speaker will be Susan Lee followed -- are you -- oh, she's not here either?

MS. LEE: I'm here.

CHIEF DEPUTY DIRECTOR HIRSCH: Oh.

Susan Lee followed by Robert Gipson and Linda Mulligan.

MS. LEE: Thank you very much for your time today. I actually didn't come prepared to speak, but I spoke with Zen, and she had me speak, given that I am a concerned citizen, as well as married to a farmer in California. And I want to thank you very much for all the time and effort that you've spent working with this issue and this the David and Goliath seemingly very important issue.

So what Zen had me share, given that I'm in the farming industry, is the average -- or the annual average of glyphosate pounds used on our different crops, and there's 70 that are listed here, and this is from data that is from the United States Department of Agriculture's National Agricultural and Statistics Service, as well as a the California Department of Pesticide Regulation.

So there's 70 crops that are listed here for California. And I started adding up the different -- the average amount of pounds of glyphosate, and this is from 2013 to 2014. And only out of -- and out of the 70, I added up just 13 of these particular crops that are abundant in California, some of them being alfalfa, almonds, cotton, grapes, all very much important to the economy.

But what I did then was look at -- I Googled the population of California, and that's 39 million people.

So only on 13 products came over -- came out to eight pounds of glyphosate per person for every man, woman, and child in California.

And I know that you've said that there's been no exposure assessment, but I don't know how -- how you look at any kind of risk exposure when every man, woman, and child is potentially looking at being exposed to eight pounds of glyphosate per year.

Thank you very much for your time. I appreciate it, and I pray that all of our children will be considered in this decision. Thank you very much for your time.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Next speaker is Robert Gipson followed by Linda Mulligan.

MR. GIPSON: Hi. I hadn't intended to speak, but the distinguished representatives from Monsanto made a couple of statements that I had some questions on. I know this isn't -- we're not allowed to ask questions in this forum, but I just -- is there a way for me to find out if I heard correctly? May I restate them and have them say -- did I mishear?

CHIEF COUNSEL MONAHAN CUMMINGS: I think that probably a better bet would be to -- we're going to be posting --

MR. GIPSON: Okay.

CHIEF COUNSEL MONAHAN CUMMINGS: -- the transcript, and also the video of the hearing. And so you can listen to what they said directly or look at the transcript. But I don't think they're willing to come back up and have a back and forth right now.

MR. GIPSON: Okay. Then I'll just state what I heard and we'll see later if I misheard this.

CHIEF COUNSEL MONAHAN CUMMINGS: Okay.

MR. GIPSON: They said that apparently cellular oxidative stress is the only cancer endpoint that should be considered, and they said no other cancer endpoints can be considered.

And the other statement, or the inference was, that OEHHA should not rely on animal studies. I don't know if I heard this correctly, but it was stunning to me, so perhaps I misheard. If I misheard, please forgive me, because we know -- everyone knows there are more cancer endpoints than cellular oxidative stress, the breast cancer study, which showed parts per trillion effects.

The mechanism there is -- glyphosate has been shown to be an estrogen receptor agonist, which means it's like -- it acts like estrogen, but estrogen on steroids, no pun intended. And the estrogen receptor is a nuclear receptor. That means it binds to the DNA -- DNA and acts

as a transcription factor, and that's how it affects even -- it can affect not only the individual, but subsequent generations. So I'd just like to hear that, if possible, clarified.

Thank you for your time.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Thank you.

And the last person who has given us a blue card is Linda Mulligan.

MS. MULLIGAN: I was five minutes ago I really wasn't not going to speak. I accompanied my best friend here, Andy Samsel. I'm myself have an organic farm in New Hampshire. We came all the way from New Hampshire.

As a teacher for 20 years I taught high school. And in one of my community service classes, their community service as a random act of kindness was to go into their father's shed and find the Roundup, bring it to your father or your mother, whoever takes care of it, and ask them to bring it back to Lowe's and to Home Depot.

I also told them do not be prepared to ask for your money back. Just ask them to please dispose of it, and do not put it in your property anymore. I taught these children for 20 years, all the freshman, and I, all of a sudden, am proud to say that I did that.

I also have a husband at home, autoimmune disease

who was poisoned by water. He is now waiting on a double lung and a liver transplant. Being from New Hampshire, we look over at California and we think you people are cool. We love California. Do you understand the power that California has, not only on this country, but on the world? And I hope you make the right decision.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Okay.

So thank you. So everyone who has given us a blue card has had the chance to speak.

So if there is anyone else who would like to speak, this is the time to do it.

Come on up. Come on up to the microphone.

We have one individual who's making his way up here.

MR. ROTHCHILD: Thank you. My name is P.T. Rothchild. And I really didn't come here to speak, but the IRAC[phonetic], or whatever it's called, the study that showed how bad glyphosate was, has been called into question. And our esteemed colleagues from Monsanto basically threw cold water on it.

So what I was handed was a paper that showed that basically that test was very limited, it wasn't valid, and they should have looked at the people who got cancer from

that same test, which is right here. I don't know if you can see it on the camera or whatever. But there's a whole bunch of people here that got cancer from that same study. So it's not just animals getting cancer, it's mammals and animals, humanoids --

(Laughter.)

MR. ROTHCHILD: -- and four foots -- four footers.

(Laughter.)

MR. ROTHCHILD: That's pretty much all I wanted to say except for one thing, whether you're sitting back there or you're sitting down here, we're all eating the same food, we're all breathing the same air, and most of us are drinking the same water. A few of us are drinking real water that's alkaline or it's refined or whatever, but most people are just drinking the water.

And none of us are going to get away from it. It's in the air. It's in bottles of wine. It's on your girlfriend's breath. So, basically, that's it.

Now, whether or not you folks do the right thing or do anything at all, it's not really going to make a difference, because Monsanto is in control of a lot of things, not just glyphosate.

And so if you do decide something, and you do the right thing, that's one step. But everybody out here, I

know they all know that this is only one arm of the cracking that we're fighting. We're fighting a number of fronts, and glyphosate is only one.

If we win on glyphosate, that's not going to cure anything. It's going to make us feel better, and we're already starting to see organic stuff in the major supermarkets, all from efforts that a lot of us have put out standing on corners, fliers, all kinds of things. So education is the key,

We have to educate people to understand that what they put into their body makes a difference. When I met John Diaz, I was a size 38.

Thanks. Thanks a lot.

(Laughter.)

MR. ROTHCHILD: I was a size 38. He radicalized me. I know that's a bad word to use nowadays, but that's what happened. I cut out the Cokes, the Pepsi's. I don't eat at a Subway on a political thing. They hire child traffickers.

But I went from a 38 down to this. Now, I'll tell you why this is important. It's healthier, I look better, but I hang around with people who are about a third my age. I like that. I don't like looking like their grandfather. I talk hip. I can dance. That's it.

So thank you for what you're doing. I know we're

up against -- like I say, we're up against ultimate evil. But if you don't fight ultimate evil, evil will win period. If you fight it, it may still win, but at least, you can die happy, because you were in the fight. You were sitting on the sidelines being a wallflower.

Thank you very much.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Thank you. Anyone else who wishes to speak?

Okay.

MS. HOPP: Thank you. I'm Susan Hopp from Marin County. And I guess to sum this up, there have been so many eloquent voices, and such passion. And I think you are all in a very tough position.

On the other hand, I think in contrast, I loved our last -- the last gentleman's message, but I think that you can have tremendous impact. We've heard somebody from New Hampshire who talks about California. California has led on so many fronts, and so I hope that you will be inspired for your best selves to come forward, and inspired by the passion of all these people, and think of someone like Rachel Carson and what she was up against in the fifties when she went -- and the sixties, when she went in front of Congress and who she is today.

So thank you so much for all that you're doing

and what you're doing.

Thank you.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: Thank you.

Okay. I see we have another speaker.

MS. DAMES: Hi. My name is Christine Dames[phonetic} and I'm from Marin County. And I want to thank you for taking this issue on, and how important it is. I grew up in St. Louis, three miles as the crow flies from Monsanto.

My sister worked there, and I swam in the Mississippi River as a kid. My father had a boat, and I spent every single weekend in that water. We had a farm by that water as well. I know that river, and I know Monsanto. I had no idea growing up then what I would come to know now about the place that was just three miles from my home.

I'm also a producer on the film *A Permanent Mark*, which looks at Vietnam veterans and their exposure to Agent Orange, cancer, and the epigenetic fallout hitting their grandchildren, and the extreme suffering that has and continues to happen to the Vietnamese families in Vietnam from Agent Orange, a Monsanto product.

I'm also an advocate for parent groups with children suffering from chronic illness in all its forms,

autism, ADD, ADHD, all of it. I follow the moms. I follow the women. I have no children. But in order to get well from serious chronic illness, I had to dive into their world, and I did.

And what I found was a world of sick children that I had no idea existed. I thought I was one of the only ones that grew up that way. I've recovered. These moms recover their children. And you know how they do it? Organic food. No chemicals. No pesticides. Organic food, and they know what to do. They're powerful. They are a force to be reckoned with. They know the science. I follow their science.

I know glyphosate is bad. It's very bad, and there are other agents inside their that besides glyphosate that are equally and even worse than glyphosate.

So I ask you please -- thank you for taking this on, and I ask you to do your job the best you know how, because I know that you need to make the right decision on behalf of all the people that are here, all the families, the men, the women, those suffering and those not, in this State, in this country, and around the world.

We're depending on you right now. They're all looking to you. Please make the right decision for all of us.

(Applause.)

CHIEF DEPUTY DIRECTOR HIRSCH: All right. Anyone else wishes to speak?

Last chance?

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. Carol would like to --

CHIEF COUNSEL MONAHAN CUMMINGS: Just one quick comment for any of the speakers that brought their -- copies of their comments, if you want to have them in the record, you can do that, or if you don't have copies and you want to submit them as written comments, that's fine too.

Thank you.

CHIEF DEPUTY DIRECTOR HIRSCH: Okay. So with that, I hereby close this public hearing. I'd like to thank you very much for taking the time to come here this afternoon. You know, those who have come to our hearings in the past know that we typically get professional scientists, and attorneys, and all that. And we don't -- we don't often get the, you know, just number of private citizens who have come here. So we know for a lot of you it was a drive or even a plane flight here, and very much appreciate that you took the time to come here and share your thoughts with us.

We have, in addition to the OEHHA staff who you

see up here, I know several of our scientists have been in the audience listening, and other scientists have been watching the webcast. So we've -- you know, a lot of us have heard what you've said.

CHIEF DEPUTY DIRECTOR HIRSCH: Oh -- well, the question is...

MS. HAYES: How many people on the Committee will be making this decision. I'm not familiar with this branch of California.

CHIEF COUNSEL MONAHAN CUMMINGS: Okay. We can restate -- restate the question. What's your name?

MS HAYES: Laura Hayes.

CHIEF COUNSEL MONAHAN CUMMINGS: Laura Hayes. She's asking how many people are on the Committee that will make this decision?

CHIEF DEPUTY DIRECTOR HIRSCH: And the answer is it's not a committee per se, it's OEHHA management of which three of us are up here. There's several others. Our OEHHA Director is a toxicologist and an expert scientist and will be -- you know, is really the individual who will make that final decision, but in concert with all of us.

And, you know, the way the process will work is at the -- once the written comment period closes, Dr. Sandy and her staff will be going through the comments

that we got today and the written comments. And we're expecting a fairly high volume of them, and we'll go through and we'll make a decision as to whether -- as to whether we should change anything in the assessment or not. And if we make changes, there will be an additional public comment period. So if you're interested and haven't gotten on our listserve, you can go to our website and sign up for the listserve, and that's the best way to keep abreast of what's happening.

So with that, you know, again our written comment period is open until 5:00 p.m. on June 21st, 2017. So there's two more weeks to submit written comments to us. And there you have two options for submitting them to us electronically.

You can either go to our website at https://oehha.ca.gov/comments, which, okay, is quite a mouthful, or you can send us comments via email at p65public.comments@oehha.ca.gov. And again our website has this information. And we would appreciate it if you put glyphosate NSRL in the subject line.

Two other ways to get us comments would be to fax them to us at (916)323-2265, or you can snail mail hard copy comments, and they should be postmarked by June 21st. And you would send them to Esther Barajas-Ochoa, Regulations Coordinator at the Office of Environmental

Health Hazard Assessment, P.O. Box 4010, MS-12B, 1001 I Street, Sacramento, California, 95812.

And again, that information is on our website and I obviously have it in writing here, if you'd like to come up and write it down.

So again thank you very much for coming here.

(Thereupon the California Office of Environmental Health Hazard Assessment public hearing adjourned at 4:49 p.m.)

C E R T I F I C A T E O F R E P O R T E R

I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Office of Environmental Health Hazard Assessment public hearing was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California;

That the said proceedings was taken before me, in shorthand writing, and was thereafter transcribed, under my direction, by computer-assisted transcription.

I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 16th day of June, 2017.

JAMES F. PETERS, CSR
Certified Shorthand Reporter
License No. 10063