

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

GREEN RIBBON SCIENCE PANEL
MEETING

FOUR POINTS SHERATON INTERNATIONAL AIRPORT HOTEL
GRAND PALACE ROOM
4900 DUCKHORN DRIVE
SACRAMENTO, CALIFORNIA 95834

FRIDAY, JANUARY 29, 2010

9:02 A.M.

A P P E A R A N C E S

Green Ribbon Science Panel Members

Deborah Raphael, MA, Co-Chairperson

Ken Geiser, PhD, Co-Chairperson

Ann Blake, PhD

Bill Carroll, PhD, Co-Chairperson

Bruce R. Cords, PhD

George Daston, PhD

Arthur T. Fong, PhD

Dale Johnson, PhD

Michael Kirschner

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Oladele A. Ogunseitan, PhD, MPH

Megan R. Schwarzman, MD, MPH

Michael P. Wilson, PhD, MPH

Robert Peoples, PhD

Julie Schoenung, PhD

Ann Wallin, PhD

DTSC Staff Present

Maziar Movassaghi, Director

Jeffrey Wong, PhD

DTSC Staff Present

Peggy Harris

Maya Akula

Kathryn Barwick

Yolanda Garza

Michael O'Docharty

Hortensia Muniz

Judy Kong

Cynthia Miller

Ron Troyer

Michael Cave

Suhasini Patel

Donn Diebert

ALSO PRESENT

Melanie Marty, PhD

Lauren Zeise

Office of Environmental Health Hazard Assessment

Akos Kokai

Ansje Miller

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1 Yolanda Garza, right here, is the person that can give you
2 those cards if you want to make public comments. So we'll
3 have the presentation and then we've let her know. We're
4 going to be keeping public comment to two minutes.

5 And also if you have, people on the webcast, if
6 you have any questions that you'd like read into the
7 meeting, send those to green.chemistry@dtsc.ca.gov.

8 Real quickly, the bathrooms, as you know, are in
9 the back of the room. And did I miss anything? Okay, I'm
10 going to turn it over to Debbie Raphael, our co-chair, who's
11 going to chair our meeting this morning. Thank you.

12 CO-CHAIRPERSON RAPHAEL: Good morning, everyone.
13 A couple of announcements of executive decisions made by the
14 co-chairs. We have eliminated a part of the agenda due to
15 the behavior of this group.

16 (Laughter.)

17 CO-CHAIRPERSON RAPHAEL: And that is the
18 clarifying questions section. So, rather than try and
19 distinguish between a suggestion and a clarifying question,
20 we're just going to eliminate that section.

21 So if you actually are very confused when Donn is
22 speaking, you can raise your hand and actually just ask for
23 a clarifying in that moment. But --

24 CO-CHAIRPERSON GEISER: Some of you helped us to
25 do this. You know who you are.

1 (Laughter.)

2 CO-CHAIRPERSON RAPHAEL: But otherwise we'll just
3 forget that distinction and go straight from the
4 presentation to public comment. And then we'll jump into
5 the discussion.

6 And I think Donn is well aware of our interest in
7 this area because it kept coming up yesterday. So I'm
8 actually really glad you were sitting through everything
9 yesterday, because I think you already have a flavor of the
10 kinds of issues that we're concerned about.

11 The other announcement is more troubling to me, as
12 chair today, and that is the hats. So, --

13 (Laughter.)

14 CO-CHAIRPERSON RAPHAEL: -- we're trying to figure
15 out what to do with the hat. Bill got this hat at dinner
16 last night, and he wants to share it. Because we made him
17 wear it all through dinner, because it's his birthday. It
18 was his birthday Monday. So, yea, Bill.

19 (Applause.)

20 DR. CARROLL: Thank you so much.

21 CO-CHAIRPERSON RAPHAEL: So we've had various
22 ideas of who should wear the hat, and why they should wear
23 the hat. But rather than me making that executive decision,
24 I'm going to turn that decision over to the big cheese among
25 us, which is the Acting Director.

1 And at the end he may decide what criteria he
2 wants to use, what alternatives he wants to consider, and
3 who, in the end, gets to wear the hat. So.

4 DIRECTOR MOVASSAGHI: This is what happens when
5 you don't go to dinner.

6 (Laughter.)

7 CO-CHAIRPERSON RAPHAEL: All right, so with that
8 little bit of fun, in anticipation we will start right off
9 with the presentation that Donn is going to give us.
10 Thanks, Donn.

11 (Pause.)

12 MR. DIEBERT: I'm Donn Diebert, I'd like to thank
13 you here this morning. I'm team leader for --

14 CO-CHAIRPERSON RAPHAEL: Donn, I can't hear you.

15 MR. DIEBERT: They told me today that the mic cord
16 is long enough I can move around. It's pretty good, but I
17 notice they're a little long.

18 But I'd like to thank you all for coming here
19 today. I'm Donn Diebert; I'm a civil engineer, for those
20 who were wondering about the engineering perspective. And I
21 think I want a little bit of that.

22 We have a team that's working with me. There's
23 some in the audience, Daphne; you heard from Su yesterday,
24 Maya, Nina; we have Jim Balcini (phonetic). We worked with
25 (inaudible). Let's see who else we have; we have the IT

1 folks, Mike, Mike (inaudible) isn't here today, and Ron
2 Schroeder in the back. We also have Yolanda and Hortensia
3 working with us.

4 As far as the Green Chemistry Initiative is
5 concerned, those six planks yesterday. One of those planks
6 is the foundation of green chemistry in our mind is the
7 toxics information clearinghouse. It gives the
8 normalization and understanding of the data that's out
9 there. And we're going to get into the various reasons for
10 the information that we do have, think we can get, and think
11 we can compile to present here today.

12 So to kind of give you a little background. The
13 clearinghouse, itself, is codified under 25256, this toxics
14 information clearinghouse. There's several things in the
15 legislation that brings it to the forefront, per se. It's
16 supposed to be decentralized. Decentralized normally means
17 it's not supposed to be a repository for information. This
18 is supposed to be something that allows for a wide range of
19 information, but not to be held inhouse.

20 So, that's what we're looking at, is a way to pull
21 the information in, but not really have the primary source.

22 So it goes down, or whatever, you still have the ability to
23 go out to those source areas, from that perspective.

24 The other concern is it's supposed to be a web-
25 based system for collection, maintenance, distribution.

1 And, again, if we can pull from public sites versus private
2 sites -- we're going to get into that a little later --
3 we'll be able to compile it and have it readily available.
4 It will be accessible to the public, as some of you were
5 concerned. Who's the user. Well, the public through
6 consumers, workers, manufacturers, producers, all those
7 folks should be able to use the internet and be able to look
8 at the information.

9 The slides are slightly different than the ones in
10 your package; some of these slides are broken up into two
11 pages, this first one, which is a little easier to read,
12 this distance for the blind folks, which is me.

13 Next slide is cost. Cost is always a big factor.
14 And when we're doing that, we're looking at the various
15 alternatives to achieve that. When you're looking at costs,
16 you're looking at functionality. You heard a lot of that
17 yesterday.

18 A lot of you folks said I'd like to see this in
19 there, I'd like to be able to see that there. I'd like to
20 see the -- I'd like to be able to go to certain locations
21 and have that information readily available.

22 All those cost a little bit to do. When you add
23 them all up, it's going to be an interesting cost
24 proposition, shall we say.

25 And as you heard yesterday, OEHHA is going to

1 provide us with hazard traits, additional information, by
2 the end of this year, the first of next, January 1, 2011.

3 Next slide, please. So to kind of get the
4 schedule out of the way so people understand. This is a
5 very ambitious schedule, just staying to be able to achieve
6 it. There's a lot of things, like I said, that are
7 basically going to hold us up.

8 The first there is the feasibility study report.
9 Going through the final throes to get that resolved. We
10 should be able to achieve that fairly quickly. We've got
11 comments from OCIO, which is one of the control agencies.

12 We're also working with the Department of General
13 Services so we can work with the professional proposal.
14 We're going to have that in the springtime. That's also
15 predicated on having the funds and money available. We
16 can't really put a request for proposal out there without
17 having money in hand, or a source of revenue to be able to
18 address that.

19 So there's other ways to address that, other to
20 deal with in getting the clearinghouse in operation, like
21 partnership with the folks. That's another option, to be
22 able to address that. So that's what we're also looking at,
23 as well. But if we have to go this route, request for
24 proposal, we're hoping to have in spring 2010.

25 (inaudible) development going by summer, late

1 summer. Beta system around the wintertime, mid-winter. And
2 the rollout of full operation in spring of next year.

3 The timing of that provides us with the ability to
4 see what OEHHA would like to see, gives the (inaudible)
5 understanding more than what we're anticipating. We're
6 going to be working real close with OEHHA so when we do
7 start development of the system we'll probably develop it as
8 a package system, so we can put various elements in as we
9 move along.

10 So that's what we're envisioning, that's the
11 schedule we're currently thinking of. Again, it will
12 probably roll to the right, as the saying goes, as time
13 moves on.

14 Next slide, please. Varied sources of data
15 information out there. You heard early on, you know,
16 there's authoritative sources. I think somebody is working
17 on an authoritative case source database. And we have asked
18 the question, are you considering that solely in
19 governments, or are you considering it various folks who are
20 well up on the information that they're dealing with, have a
21 database.

22 But this is how we look at the data sources. We
23 have international governments; we have federal governments;
24 state governments, California state governments.

25 Next slide, please. Nongovernmental agencies and

1 organizations; manufacturers; university research,
2 independent research facilities, think tanks, consultants.
3 So there is a whole slew of information out there. Some of
4 it is privately held, paid service type stuff, or you need
5 to be a member. So those things are tough to get ahold of
6 and tough to use, as well.

7 And those we're probably not going to bring in
8 easily. Try and work out a way in the future to be able to
9 address that.

10 Next slide, please. As far as information
11 sources, kind of give you a sense for where we're at, what
12 we have going on. USEPA ACToR has generally generic
13 chemicals, about a half million. They also have up to about
14 3.4 million in compounds and other information.

15 ECHA, which is the European Union folks, about
16 2000 chemicals. EU Reach is also working with ECHA; they
17 have about 143,000 chemicals plus in there. The Danish EPA
18 and Canadian.

19 Next slide, please. Prop 65, this is not really a
20 database, but it is a listing of chemicals in the state
21 assumed carcinogenic.

22 NIOSH, this is SIGMA Aldrich and Fisher
23 Scientific. Those are MSDS type information. So they are
24 sources of information. National Library of Medicine
25 Toxnet, also has about 70,000.

1 As we move into our current thinking, this is
2 strictly a mock-up; it's not meant to be -- here's the final
3 here we're doing. This is meant to be informational, what
4 are you guys thinking, here's what we're thinking.

5 We initially had a round of the survey interviews
6 with a number of folks who are here with the science panel
7 to get a sense for how you currently do business. How you'd
8 like to see business done. What information you'd like to
9 see in there.

10 We also talked with other folks in business, small
11 business, medium businesses. We looked at the university
12 information, folks who work at universities that do the
13 research. We have access to information, how they do
14 research. Top consultants, not only just consultants that
15 do the alternative analysis or product substitution or
16 process change stuff. We talked with people that are
17 working on databases. When you start looking at that stuff
18 it gets real interesting. And you find some of the nits and
19 grits, which I won't go into today, of problems with
20 actually putting a database of this nature, this size,
21 together. And the cost is one of those factors that are
22 driving this.

23 As you look at this slide there's several things
24 on the slide I'd like to point out. We'll work our way
25 across the top. The chemical search first, on the left-hand

1 side there, for those who can read it. For those who can't,
2 we're going to look for chemicals, synonyms, CASRN number,
3 EC number, I put number because we were anticipating.

4 The hazard traits are toxicological end points in
5 the middle column. We're looking at that information from
6 OEHHA, as well as information that would be valuable to have
7 in there. We're also looking at an alphabetical search.

8 One more, back up. We're looking at an
9 alphabetical search so if you don't know quite how to spell
10 the name, you'll be able to go into alphabetical search.

11 We're also looking at the top chemicals type of
12 search. In other words, if there is a hot understanding for
13 chlorate or PBA or some of the other chemicals of concern
14 right now, people are looking for information. This will
15 kind of give you a sense for where people are looking, as we
16 speak.

17 We're also looking at having source out, towards
18 the bottom you'll see source link and alphabetical
19 information. We're looking at questions or comments coming
20 back to the clearinghouse, to improvements to the webmaster,
21 that aspect.

22 We have the traditional disclaimer on there, which
23 basically we're saying this isn't our information. This is
24 information we brought together for your benefit. We also
25 have on the side, the usual DTSC homepage, green chemistry

1 homepage.

2 This, again, is preliminary. It's subject to
3 change. Willing to work a lot of stuff out to go forward.
4 You guys provided a lot of information. A lot of you will
5 see we've incorporated already, matching that, you know.
6 But we won't go there.

7 The next slide we're going to look like -- if you
8 want, tick off the end points or the hazards traits. If you
9 want to see what information we have in the clearinghouse
10 we're -- this to that aspect. If you put a name with it,
11 you get to ask specific chemical and those traits.

12 Next page, please. We're looking at the
13 alphabetical type, as you type in benzene, we go, oh, got to
14 type in -- you'll see there's like 912 different chemicals
15 in this particular list that have some sort of benzene in
16 it. Doesn't mean it's, you know, the very best -- thing
17 you're looking at. The first one is the highlighted one,
18 but that's the one that you stop typing around.

19 It tells you that X checkmarked box tells you we
20 do have some information there, as opposed to just a name
21 and a box.

22 Next slide, please. So we're going with the
23 benzene highlighted. Now this is a summary page that we're
24 looking at. The summary page will provide the user, in our
25 mind, consumer and workers with information about the

1 chemical they're looking at.

2 As you'll see, the name at the top, the CASRN
3 number, chemical formula. You also see synonyms. You'll
4 see a little footnote maybe, maybe not. You'll see on your
5 handout some footnotes.

6 You'll also see right there in the middle the
7 OEHHA Prop 65 information. And for benzene it is there.
8 The State of California does look at it as a carcinogen. We
9 also have the link out to get to that information.

10 Chemical summaries, some. You know, physical
11 properties, it's also there. The footnotes will take us to
12 something similar we're going to go into, but not on the
13 traits.

14 Yes, sir?

15 DR. FONG: The chemical summary, is that generated
16 by DTSC or OEHHA? Where does that come from?

17 MR. DIEBERT: That's coming from one of the data
18 sources. So, when you click on that footnote it'll take you
19 to that particular source. Will have tabs at the top that
20 will take you to additional sources that have similar
21 information.

22 This particular information is from NIOSH.

23 DR. FONG: So how do you choose the number of
24 sources that you have to put in the -- to decide the column
25 or space?

1 MR. DIEBERT: That's one of the questions that,
2 you know, we're open on. Where are you going to put
3 information in those information boxes, or link out to where
4 you'll be able to find information, and have those topics
5 on.

6 So that's the current thinking, but we're open,
7 you know. You guys are going to use this as much as
8 everybody, we're hoping. So whatever insight you do have,
9 we appreciate.

10 The physical and chemical properties. I know some
11 people have some concerns over that. And, again, this is
12 one database's perspective. It's not necessarily the
13 perspective.

14 On this page you'll also see the ability to do a
15 new search. So if you have the wrong benzene or if you're
16 getting tired of the information, you can go back and do a
17 new search.

18 At the top you'll see several tabs. Some are dark
19 bold. Some are grey. The dark bold indicate there's
20 information under those tabs. The grey ones there's no
21 information under that particular tab.

22 Next slide, please.

23 CO-CHAIRPERSON RAPHAEL: I'm sorry, --

24 MR. DIEBERT: Yes.

25 CO-CHAIRPERSON RAPHAEL: -- if you can go back one

1 slide?

2 MR. DIEBERT: Okay.

3 CO-CHAIRPERSON RAPHAEL: So the red under hazard
4 traits --

5 MR. DIEBERT: Let me explain that real quick.

6 CO-CHAIRPERSON RAPHAEL: Yeah.

7 MR. DIEBERT: The grey box you see on the right-
8 hand side that has red in it, those are tabs, or will be
9 tabs in the future, we're anticipating that will have
10 information for that particular chemical.

11 So, like you'll see carcinogenicity; you'll see
12 developmental toxicity. There's information under those hot
13 keys.

14 CO-CHAIRPERSON RAPHAEL: Okay. So that red
15 doesn't mean they are carcinogenicities, it just means you
16 have information on them?

17 MR. DIEBERT: That's correct.

18 CO-CHAIRPERSON RAPHAEL: Okay, that --

19 MR. DIEBERT: This is strictly an informational
20 database. Whether it's a carcinogen or not, in this
21 particular case, we put an entry it is, for at least
22 California.

23 For the other ones, I mean that's open to
24 interpretation. If we do have a source that does make the
25 call, we'll try and put it in the summary sheet here. We're

1 assuming that this will be the page where, at least the
2 concerned will go to, and kind of go, okay, that makes
3 sense.

4 So we want to make sure that this is easily read,
5 it's workable, has good solution to it. And it helps people
6 understand what's going on.

7 Again, cost is one of those factors. We can't get
8 the functionality upfront. You're going to lose some of
9 that understanding immediately. And then you're going to
10 get into that long ride trying to find information.

11 Yes, sir?

12 DR. JOHNSON: So on that summary will there be --
13 will somebody be writing the new summary? Or just picked
14 from various sources?

15 MR. DIEBERT: We're open to that. We're not going
16 to write it. We're looking at pulling that from somewhere
17 else, or keying out to another location to be able to pick
18 that information off. But right now it's just -- this is
19 just everybody's understanding; it's not ours.

20 This is a library. As you step in the front door,
21 you go to the index sheet. When you step to that index
22 sheet, the question of the day is does it help me or not.
23 That opening page, does it help me get somewhere.

24 As you move through these slides, as we move
25 through the various pages, does it help me get what I need,

1 or am I going to get lost quickly. That's what we're trying
2 to ask ourselves. At least up to this point.

3 So the next slide. This shows, if we clicked on
4 the government, the U.S. government tabs that has bold
5 information on it, you'll see another tab again pop up,
6 which indicates bold. That's information, or a design of
7 information.

8 You also see the traditional disclaimer again,
9 which says this isn't our information. You're also about
10 ready to link out to a location.

11 So, from that perspective, here's what we're
12 thinking now. As you have your mouse and you start to roll
13 over some of the tabs, usually you won't really understand
14 what they say because they're kind of read-in. You'll see a
15 icon pop up. If you look, the legislation's also an
16 indication of when -- is there new information identified.

17 This provides the user with -- at least when we
18 updated the information, whether it's new or not, it's going
19 to be one of those, you know, questions of debate. But
20 here's how we're going to try and meet some of those needs.

21 From here, like I said, we would link out to a
22 location. But instead of linking out, let's go to our first
23 question. First question is what suggestions do you have
24 for the design of a website that can be easily used by
25 consumers, manufacturers and the scientific community.

1 And want to encourage them to return to the clearinghouse.

2 MS. SPEAKER: We're not handling that now.

3 MR. DIEBERT: Very good. Any clarification up to
4 this point? Looking good.

5 Next slide, please. As we click on the tab that
6 said USEPA ACToR, you'll see for benzene a number of
7 chemicals pop up. In this particular case we lessened the
8 compilation to just these three chemicals. All these three
9 chemicals do have information in all the boxes. The boxes,
10 as you point out, are red. They also have kind of a letter;
11 it helps the folks that are color blind get a sense for if
12 there's information there or not. So you have to be
13 sensitive to those issues, as well.

14 Like I said, you get used to these boxes indicate
15 they do have information. They have -- I'll cover that a
16 little later.

17 Next slide, please. You see this particular site
18 is -- this is, again, after you go further into it. They
19 have roughly 25 boxes of information. Those first eight
20 boxes that had red squares on them, they're incorporated
21 into one of these 25 boxes below.

22 They divide their boxes into basic information,
23 synonyms and substances; toxicological information, there's
24 about 13 boxes there. Potential helpful information,
25 roughly eight boxes there. And additional information; two

1 boxes basically data collection notes. And external
2 searches by name or CAS number.

3 Next slide, please. This is the eChemPortal which
4 Su alluded to yesterday, and gave a good discussion,
5 presentation on. There's roughly about 15 web bases that
6 are all involved in this.

7 You type in a name like benzene, they will give
8 you if there's any information in those databases. There's
9 13 on this particular one, so there's two that don't have
10 any information for benzene as far as sources.

11 Which brings us up to the question, do you
12 recognize some of the chemicals. There are vast amounts of
13 information available. How do you want to group the various
14 sources of information.

15 What we've done is we've kind of tabbed them, but
16 we're open to suggestions and understanding if there's a
17 better way to do it. Potential groupings -- next slide --
18 is the regulators, university, scientific institutions,
19 special interests and consumer groups. We went with the
20 U.A. authorities, authorities in other countries,
21 nongovernmental organizations and other. We also have --
22 are open to other ideas.

23 So that's, you know, some people say authoritative
24 sources or nonauthoritative sources, is that going to be
25 divided enough. And how you throw one into the other; it's

1 one thing to tab something, it's another thing to be able to
2 populate that particular tab. So that's question two.

3 On to the next slide. This particular slide is a
4 slide that has no real chemical information on it. It does
5 have a chemical name, a chemical structure. This is from
6 the EPA database. This chemical, acetoacetaldehyde and
7 Eupatorium cannabinum. Both of those have not much more
8 information than what you see on this page. You can see
9 there's no red boxes on the right-hand side, which was --
10 earlier by those red boxes.

11 So this is one of those questions, do you want to
12 show a blank page. Do you want to show some other way of
13 doing it. Is there a quick way to say no information, so
14 you can move forward fast.

15 Next slide, please. This is a EC joint search.
16 And this is a thing, 1,2 diyl bis pento bromobenzene.
17 There's very little information here. Essentially you have
18 the structure, you have the CAS number, the EC number. And
19 it does provide some producer information, which some of you
20 asked, you know, is there a way to get like the impacts or
21 releases or production numbers. This is essentially one way
22 of doing it. So there is information out there. The
23 question is how do you want to bring it together.

24 Next slide, please. This is kind of the way we're
25 also looking at summarizing it. Instead of having the

1 information that is open to interpretation like the
2 synonyms, chemical summary, physical chemical properties,
3 because everyone has a little slight different take
4 potentially. We're looking at linking out to another tab-
5 type system to give that understanding, what those mean.

6 As far as summary hazard traits, we're thinking
7 whatever major tabs we have on top we'll be able to put the
8 hazard trait across the slide there, and then check boxes
9 and see if there's information in those or not.

10 Again, you'll see the grey box on the side.
11 Again, these were just for mock-up purposes. They're not
12 really to say -- but this is what we're looking at as far as
13 potentially moving this direction.

14 Which brings us to question number three.
15 Question number three is: Recognizing there may not be
16 information for some chemicals, how could we best present
17 this lack of information.

18 And the next slide, please. Which brings us to
19 the question summaries. We have basically, what suggestions
20 do you have; recognizing what chemicals; and recognizing
21 there may not be information. So you have a lot of
22 information, little information and you have no information.

23 So that's pretty much the information in a
24 nutshell. We're looking at trying to get that
25 functionality, which means upfront there needs to be a fair

1 amount of information, a fair amount of cost, a fair amount
2 of input to get that together.

3 And to back in for O&M, we're looking at how best
4 to keep it going. Scorecard.org was a web-base, still out
5 there, on their last legs near as we can tell. They ran out
6 of money, which was one of the questions earlier. How do
7 you fund it? How do you keep it going.

8 I mean we're looking for a partnership to kind of
9 help us through this, to work with us, to make sure that
10 we'll be able to refresh the information, make things
11 happen. If not, then if we discover it, we can do the right
12 thing and make it happen.

13 So we're working with both those angles to make
14 this happen. So, with your information and input, we look
15 forward to it. Open to questions.

16 CO-CHAIRPERSON RAPHAEL: Thank you for that
17 fabulous presentation. Obviously you've given this
18 phenomenal thought and you've done a lot of research on what
19 other folks are doing.

20 There's cards up, but the way we're going to do
21 this is we're going to have the public comment first. So,
22 it's fine to be thinking about your comments, and I will jot
23 those down, the people. But first we're going to turn it
24 over to public comment here, if there's any other things the
25 public would like us to be considering as we open up this

1 discussion.

2 So, should I turn this to Maya.

3 MS. AKULA: Good morning, everyone. This is
4 (inaudible). I have one card? Anybody else want to
5 comment?

6 Mr. Akos Kokai.

7 MR. AKOS KOKAI: Thank you. My name is Akos Kokai
8 from UC Berkeley. I realize I have two minutes, so I have a
9 couple of areas of comment. The first is, Donn, you said
10 that the sort of real source of value of the TIC is
11 normalization and understanding of the data that's out
12 there.

13 But I think that we need to recognize that there's
14 a really wide range of anticipated stakeholder groups that
15 could be using this, you know, within just, you know, within
16 this panel, itself, there's a huge range.

17 And the different users, for example, ranging from
18 consumers, who are nonexperts, let's say; retailers and
19 purchasers, manufacturers and formulators, and going all the
20 way down to scientists, there's a huge range of the detail
21 of data that people would require. And a range in the level
22 of interpretation of the data that exists in preexisting
23 databases that will be linked.

24 For example, consumers would require a lot more
25 interpretation, whatever helps to interpret data to make it

1 meaningful to them than scientists.

2 Also I think that scientists and maybe even most
3 of the groups would require a lot of robust search functions
4 and filtering functions for all this data.

5 It's a common pitfall of existing databases that
6 only have a very limited number of departure points for
7 searching. You can search by -- find one specific chemical,
8 or you can find one specific hazard trait. And those are
9 only two starting points.

10 And there are other ways to design navigation
11 systems. For example, -- navigation where you can not
12 restrict yourself to a limited number of categories to
13 search by at one time.

14 My other comment is brief, and that is that I
15 think that we should be really mindful of how users are
16 presented with the existence of absence of data. For
17 example, the EPA ACToR's red boxes to indicate that data
18 exists, or the use of red text to highlight the hazard
19 traits.

20 I mean, to make people interact with the
21 information in that way sends a certain message. And I
22 think that we need to be very mindful of designing that kind
23 of thing.

24 Thank you.

25 CO-CHAIRPERSON RAPHAEL: Thank you.

1 MS. AKULA: I have one more comment and it's from
2 Ansje Miller.

3 MS. MILLER: Thank you. Hi, my name is Ansje
4 Miller and I'm the Policy Director, Center for
5 Environmental Health, as well as a Coordinator for the
6 Change Coalition Californians -- Green Economy.

7 I had a couple of questions, I guess. One is will
8 there be use data so that as a consumer or worker we can be
9 looking through, you know, we hear of a new study about a
10 chemical, and want to find out more information about it.
11 If we can look and see what are the -- of exposure and how
12 might I actually be affected by this chemical.

13 And the second is around transparency of data.
14 Because I know that some data comes in that's marked only
15 for regulatory eyes versus the general public. And will
16 that kind of information be flagged so that consumers can
17 understand that piece of information?

18 And of your sources, is it possible to say which
19 other people have access to versus only regulators?

20 CO-CHAIRPERSON RAPHAEL: Thank you.

21 MS. AKULA: Any more public comment? (inaudible).

22 At this time we don't have any more public comments. I
23 would like to turn this to the co-chair Debbie.

24 CO-CHAIRPERSON RAPHAEL: Thank you. Okay. It is
25 now 9:30 and we are doing brilliantly in terms of going

1 faster. So I would suggest we do not take a break at this
2 time, and just jump right in.

3 So, if that's okay with everyone, then I have Dele
4 and George, Dale, in that order. And then I'll just keep an
5 eye out.

6 DR. OGUNSEITAN: Thank you. And thank you, Donn,
7 and all the DTSC Staff that's worked on this. I think it's
8 wonderful to have something concrete to respond to. And the
9 process is quick, in my view.

10 The summary page, I think, is probably the most
11 important in the context of the -- and rather in summarizing
12 the scientific information, this will be a lot of work, I
13 admit, for a lot of chemicals, I'd rather have it more
14 targeted to consumers who want to know, as the public
15 comment suggested, where can I be exposed to this chemical.

16 What products is it used in.

17 Are there legislative restrictions anywhere in the
18 world. What is DTSC's opinion about the chemical and its
19 status in terms of regulation.

20 It would also be the page that will be updated as
21 information comes in later years. I think most of the other
22 databases LD50-type information, maybe it's there. It's
23 permanent; nobody does any more research to update it. But
24 that summary page should be as dynamic as possible
25 reflecting the current status of DTSC's work on the

1 chemical.

2 CO-CHAIRPERSON RAPHAEL: Thank you, Dele. Now,
3 before I go down I just want to call attention to the fact
4 that there are these three questions up there. And Dele's
5 questions, to me, or thoughts, were really around question
6 number one in terms of suggestions.

7 So I'd like, if we can, just to maximize the
8 interplay between panel members, to focus on question number
9 one for a little while. And then we'll move on. So I
10 apologize if somebody's card is up to talk about the other
11 two. But let's -- it's so much more interesting, I think,
12 if we can go back and forth deep on one question at a time.

13 So we're going to start with that first one, which
14 Dele did when he was talking about general comments. Okay,
15 Sorry, Ann. Okay, so then George.

16 DR. DASTON: Go ahead, you're next.

17 CO-CHAIRPERSON RAPHAEL: Oh, I thought you put it
18 down because you were -- okay. You're just efficient.
19 Okay.

20 DR. BLAKE: Should know that about me by now. So
21 that actually does make it easier because I'll focus on
22 question one to start with.

23 Obviously working with Good Guide we have a lot of
24 experience with this particular subset of folks. And from
25 the mock-up that I've seen, that's the kind of database that

1 I would use as an alternatives assessment practitioner.

2 Maybe building off Dele's comment, perhaps you
3 might even have a different -- and also comment about
4 consumers potentially needing a little more interpretation.

5 That's been our experience clearly.

6 We have a database much like the one that you've
7 mocked up here underlying this consumer information portal
8 that we have as an opening page.

9 So you might even have at the beginning somewhere
10 like if you are the following type of user click here and
11 we'll take you to a different kind of portal.

12 I would echo many of the comments that have been
13 brought up about use data. And this kind of goes to another
14 question about lacking information, as well. I'll leave
15 that till later. But you might be able to connect it to say
16 this is the use data, this is where you, as a consumer, are
17 likely to see this. And this is what you need to be
18 concerned about about these particular chemicals in this
19 kind of use. And then you could also highlight there what
20 data are missing.

21 In terms of summarizing data and making it
22 available in a way for a consumer you start with -- what we
23 found is if you start with a rolled-up information, and then
24 gave consumers the opportunity to roll further down.

25 So if you look at a Good Guide score you see it's

1 to the three, health, environmental and social. Under
2 health you can click and get more ingredient data. Then you
3 get further down.

4 And the way we've summarized that data has been
5 actually by end point. So you say the carcinogenic -- data
6 on carcinogenicity -- have trouble with that particular
7 icity -- it comes from the following things, IARC, NTP, et
8 cetera. So that's one way to do it. I'm not sure that it's
9 necessarily the most useful.

10 What we have found is consumers don't, for the
11 most part, don't go that far down in the level of detail.
12 But we do have it available.

13 And then, you know, we can talk forever about
14 issues about trying to flag particular chemicals in
15 particular ways, and how that works on just the data
16 management side.

17 The other question, one question I had is you had
18 up there this data was refreshed at a particular time. I'd
19 be really cautious about that, because we've been refreshing
20 our source databases on a regular basis. But they,
21 themselves, don't get updated that often. Prop 65 is an
22 exception. But like IRIS, for example.

23 So I, as a consumer, would find that -- or even as
24 an alternatives assessment practitioner, would find that
25 somewhat mislead. If you can make it clear that this is

1 when DTSC last accessed the information.

2 CO-CHAIRPERSON RAPHAEL: Excellent point. Okay,
3 George.

4 DR. DASTON: Okay, let me try and stick with
5 question one, and not repeat it. That's my goal. So, I
6 think it's really been points about how there may not be an
7 interface from the mock-up at this point that the general
8 public could really access. And I think that needs to be
9 thought through.

10 And as that's thought through, you know, there are
11 already models out there of how people have given
12 information to the public on specific toxic chemicals, you
13 know. The whole ATSDR toxicity profiles have, in fact, the
14 section on communicating to the public as to how you might
15 be exposed; what are the toxicity aspects along with the
16 more in-depth and detailed kind of information for
17 scientists. So there are models out there to grab hold of.

18 One thing that strikes me is that as we have put
19 together databases, the only perfect way, or close to
20 perfect way, of identifying chemicals is by chemical
21 structure. There are too many instances where CAS numbers
22 either refer to more than one chemical or are insufficient
23 to capture all forms of a single chemical.

24 And so chemical structure is really how things
25 like ESS tox and ACToR can be best accessed. And ACToR, you

1 know, ACToR's actually trying to help you out by identifying
2 things that might be analog, which is it's got its own
3 problems because it's basically making that assumption for
4 you and identifying all kinds of things that you might not
5 be interested in. But that's a different issue.

6 But you might want to think about pulling in some
7 sort of chemical drawing program and chemical structure
8 search to make this useful.

9 And then in terms of, you know, reliability and
10 ease of use, there are lots of different levels of curation
11 and quality control and different data sets. And I think
12 that that is something that it would be nice to find a way
13 to capture, just as you would information about how you
14 would update, it would be nice to have information from
15 these sources as to how they maintain quality.

16 I guess the last point that I wanted to make for
17 question one is there are some of the end points of toxicity
18 that I think everybody would find a way to classify by.
19 Like the boxes that ACToR has.

20 But then there are other aspects of or end points
21 of toxicity that we talked about yesterday that might not be
22 as readily identified. And that's going to be an issue.

23 And so, you know, once you get down into some
24 aspects of endocrine disruption, for example, let alone some
25 of these indicators that we talked about that might not

1 necessarily relate to a particular disease state, it's going
2 to become more difficult to know whether you have data or
3 whether, you know, there's an empty cell.

4 And so that might be something to think about in
5 terms of how one conveys the data. So that right-hand box
6 where you had the various icities, some were red and some
7 were grey. Those might not actually be true. I mean that
8 might actually be necessary for data rich chemicals, for
9 example like benzene, to go back and actually scour the
10 literature and see, in fact, what's out there, suggest that
11 many of those boxes are filled at least partially.

12 So that might be something to think about the
13 design as to whether that is something you want to put out
14 upfront with the knowledge that it's probably not going to
15 be perfect as to whether you have the cells filled or not,
16 or whether you want it to be something you can click through
17 and it's more for practitioners to determine what data would
18 fill those particular boxes.

19 CO-CHAIRPERSON RAPHAEL: Thank you. Dale, please.

20 DR. JOHNSON: Thanks. Don, that was really a good
21 presentation, very concise, nicely done. And it actually
22 gave me the, you know, really allowed me to understand some
23 of the things and some of the things you actually need,
24 which was important for me to actually get that part of it.

25 And one of the things obviously is partnerships to

1 be able to actually create some kind of interfaces where you
2 can do meta searching on various types of things,
3 applications to different user groups.

4 And I think, really, when I listen to the fact
5 that what it costs to do various things, obviously this is
6 searching for various types of partnerships.

7 And it would be interesting for me to find out
8 what types of partnerships you're actually looking for. Are
9 you looking for IT companies? Are you looking for
10 scientific professional society types of things, like the
11 Society of Toxicology, or the American Chemical Society? Or
12 groups that actually might be interested in providing a
13 certain type of help that would also link through their
14 website?

15 So there is -- so the type of thing that comes to
16 me, because I think you're -- I mean you're obviously headed
17 in the right direction, making the information available;
18 making a lot of it available. And then putting it into a
19 form that allows applications to be applied to it.

20 And so the -- you know, one of the key areas is
21 how do you -- what kind of application can you put -- can be
22 adaptable to it that would allow you to do meta searching
23 through various types of hazard traits, different chemicals.

24 Similarity searching on chemical structures, and some of
25 that sort of thing. That will be really important to

1 certain types of users.

2 And I don't think you can do that within the site.

3 And I don't think you actually want to do that within the
4 site. So it's going to take some kind of partnerships to do
5 that.

6 And I think what would be valuable if we can get
7 an understanding maybe a little bit of what partnerships
8 you're looking for; how you're doing that. Then maybe a lot
9 of us, as a group, can actually start to ask those questions
10 and try to line up some of those partnerships. Because I
11 think that's going to be really important to be able to use
12 this in a proper way.

13 And the understanding of that, because I don't --
14 you know, I don't quite know how you design a website to get
15 into meta searching. But I know you have to index things in
16 certain ways so you can actually get there.

17 And this may be something that you have to do to
18 be able to get applications in there. It might cost some
19 money. And it might be the index is based on this long list
20 of hazard traits.

21 So that's the kind of things I'm asking --
22 suggesting.

23 CO-CHAIRPERSON RAPHAEL: Donn.

24 MR. DIEBERT: You have a real good question, good
25 point there. I left off some of the information because I

1 didn't know how much detail you guys wanted. I mean looking
2 at a number of websites; some of the websites do have
3 download the information. So there's basically three ways
4 to get your information. Download it, use the web crawler,
5 crawl it off, or have the -- the site. All those imply you
6 have the information in hand.

7 Once you have the information in hand, to index it
8 you'll have to basically transport it onto your website, and
9 how you want to present the information. So all that is the
10 prioritization, so it kind of gives you that understanding
11 of where I want where, what I want and how I want to present
12 it, what I want it to look like.

13 But we're not using necessarily that information
14 to go back to. We don't want them to be searching, quote-
15 unquote, on the information that we have to store to be able
16 to put that out there. We're going to link them out to
17 those sites, be it USEPA ACToR, EUCLID, you name it. You
18 know, at least 200 under ACToR; there's probably another 200
19 sites out there easily. And if you're looking at one and
20 two bits and pieces of information, there's probably a
21 couple hundred more of those.

22 So we're looking for basically folks to help us on
23 the IT portion; to help us on basically developing the
24 activity, per se, of how to populate, when it looks good
25 population. Want to work with people to make sure that that

1 works out so it does make some sort of sense. Because
2 getting a consensus from more than two people is extremely
3 difficult. Even two people can be difficult at times.

4 But that's what we're looking at, some way to work
5 together. Because we can't do it without you. You guys
6 have the information. You guys do go to certain websites.
7 You guys are focused on certain aspects.

8 As far as a generalist, you know, I know just
9 enough to get me in trouble. I'm not a toxicologist, so
10 I've got to rely on you folks for the toxicological aspect
11 of it.

12 DR. JOHNSON: Just as a information I will
13 probably have somewhere between 30 to 50 students every year
14 that will be accessing the site, getting the information,
15 putting it into certain types of modeling programs. And
16 they will instantly, because they're al fourth-year
17 undergraduates primarily, they will instantly be telling me
18 exactly what's good and what's bad --

19 (Laughter.)

20 DR. JOHNSON: -- how they could use it. And it's
21 instant. And I'm getting text messages right now, as I'm
22 sitting here, on some of the stuff I said the other day.

23 (Laughter.)

24 DR. JOHNSON: So, you know, it's extremely
25 valuable. It's kind of a quality control from a very high

1 end user in some respects.

2 And one of the things, there is the availability
3 through public sites to do all the chemical drawing.
4 Actually it's right on PubChem, so it's really, it's part of
5 that whole system. And there's other available freeware
6 that you can do similarity searching through chemical
7 structures. And some of that's tied directly to certain
8 databases. So there's a similarity structure thing that
9 goes right to the Berkeley gold carcinogenicity database.
10 So you get all the information based on that. And you can
11 set the limits on how similar you want the structures to be.
12 And those are free. So they can be linked into that very
13 easily.

14 But other than that, I mean students, for
15 instance, will just go right to those sites and use those
16 various tools.

17 So, I think -- so it appears that the major, then,
18 partnership is more of an IT type of partnership. Is that
19 right? Is it primarily IT? Because that would be important
20 for me to be able -- because I'd like to have some
21 conversation --

22 CO-CHAIRPERSON RAPHAEL: Yeah, that was the core
23 of the question. The kind of partnerships; who you're
24 really looking for. And your answer was very IT focused.

25 MR. DIEBERT: We're looking for IT as well as

1 toxicology. We need to have agreement and understanding and
2 be able to afford. I know OEHHA will be looking at
3 providing the hazard traits and points.

4 The question is for the clearinghouse, itself,
5 we're populating like a library. How do you want to
6 categorize the books? How do you want to put these on the
7 shelf? Where do you want to pull them off from? Once we
8 have the list from OEHHA, then we can populate that shelf.

9 There's going to be certain sites where there's
10 going to be a dichotomy or different of opinion, however you
11 want to phrase it. It may fit through -- ten different
12 categories, link out and will link you back to the same
13 location.

14 So we're seeing that, so, yeah. We're looking at
15 getting information and advice through partnering to make
16 that happen.

17 CO-CHAIRPERSON RAPHAEL: Su.

18 MS. PATEL: I just want to add that we are looking
19 at any kind of partnership would be welcome. But looking at
20 the schedule, our priority right now would be an IT
21 partnership. So we can get the base and running. And then
22 we will look at partnering with other people to say you can
23 do this better; you can do this quality control; you can do
24 that.

25 We have OEHHA as our partners to look at the

1 toxicological stuff. We're just looking at building this
2 system right now, so IT partnership is a priority.

3 DR. JOHNSON: Do you need a State of California
4 partner? Or can it be past that?

5 MS. PATEL: I think anybody could be a partner.
6 We welcome everyone.

7 CO-CHAIRPERSON RAPHAEL: Okay, thanks, Dale. So
8 let me just say I've got Mike, Tim, Kelly, Anne Wallin, Ken,
9 Roger, Meg and then I'll look and see who I've missed. So,
10 Michael.

11 MR. KIRSCHNER: Thank you. Just a couple of quick
12 points. I want to first of all agree with some of the other
13 comments that red's not a good color.

14 (Laughter.)

15 MR. KIRSCHNER: Just to specify information. If
16 you're specifying that there's a real problem here, that's a
17 good color. At least in this culture.

18 About the design of it, I think it's less
19 important in the initial product to consider specific user
20 types because, as is quite clear, the different classes of
21 users, consumers on one hand, people like Ann and George on
22 the other, and people like me, you know, somewhere in the
23 middle, not a chemist, not a toxicologist, but need access
24 to this information, that's extremely broad.

25 One of the design considerations therefore should

1 be that product an API, an application for interface, so
2 that you can have third parties interface with the system,
3 with the engine of the system. And then they can produce
4 the right sort of user interfaces for specific classes of
5 users. That will kind of expand your resources, as well,
6 automatically to build this thing.

7 And how much quality control you exercise over
8 those partners or anything, that's another issue entirely.

9 Whether you sell access to the API to make money is another
10 issue.

11 But at least in the initial I wouldn't worry about
12 it, just how usable it is for a specific class of user. The
13 concept of the group, you can actually get this data from
14 other systems; search on various characteristics. That's
15 probably more important.

16 One comment about tying it to regulations, that's
17 very difficult. Dele mentioned that. It's nice to have,
18 but it's a huge task. There are companies that do that and
19 you pay for the data. And some is pretty obvious, but
20 there's a lot of countries and a lot more locales that have
21 specific regulations on specific chemical substances, all
22 over the place. To try to collect all that is enormous,
23 enormous task.

24 That's it.

25 CO-CHAIRPERSON RAPHAEL: Thank you. Tim.

1 DR. MALLOY: Thank you, and thank you, Donn. That
2 was a really great presentation, and seeing the mock-ups
3 really helps kind of get your head around what you're trying
4 to do.

5 I had just a couple of things to say relating to
6 question one. That when I think about stuff like this I
7 think about, you know, my mother-in-law, who is a
8 intelligent woman, but has real trouble on the internet
9 making access of things, right.

10 And so I think, you know, if you want to reach the
11 user group of consumers I'm not sure that anybody in this
12 room can really capture that, because where you are -- all
13 of us have -- you can't kind of exclude the experience that
14 you have in trying to say, okay, now I'm the average
15 consumer.

16 So one thing I would suggest is that in developing
17 this you really try and make use of either focus groups or
18 some kind of structured study of how and why consumers would
19 use it.

20 And, you know, there's work that's been done
21 looking at the Haz-Com standard at the federal level, and
22 how workers have actually used MSDS sheets. It's really
23 instructive and surprising some of the things you see.

24 We just did a study at UCLA of how the nutrition
25 labeling requirements, under the federal law, have been

1 working. And how the Haz-Com standard has been working.
2 And one of the things that we found was there's this notion
3 of embeddedness, which is you have to really, in order to
4 measure how useful these types of things are, you have to
5 really think about the environment in which they're going to
6 be used. And the pressures that people face. And also
7 what's salient to them, why are they going to care.

8 And I don't know the mock-up that I've seen, even
9 with like a special page that says, here, this is for
10 consumers. I don't know that it gets there on the
11 embeddedness aspect of it. And I think that's something
12 that maybe you could reach out and find partners to help you
13 perhaps do the type of research that will help you customize
14 this in a certain way.

15 I want to build on something Michael said, which
16 is, I was thinking like where are people going to -- there's
17 going to be some subset of consumers who are focused on
18 chemical policy. They're worried about it. They're going
19 to be using this site. And they maybe have had enough
20 experience and have devoted enough time to be able to use
21 this in a way that will fill their needs.

22 But it -- I get the feeling from the statute and
23 from what I've heard yesterday and today, that you're also
24 trying to have a broader impact and reach out to people in
25 the way that, you know, yesterday Roger was joking about

1 being in, I don't know, was it Taco Bell or -- right? And
2 think about that. That nutrition labeling stuff does work
3 for some people, but it works because when you're there
4 making your decisions it's right in front of you, right.

5 So, for example, I could foresee some type of an
6 app or icon or droid that would link into this. Now, I
7 think that's kind of where Michael was going, that somebody
8 would -- you know, if this was available somebody could
9 create this app and it would be available.

10 I actually would go further and say that you ought
11 to be thinking about identifying a focus strategy to make
12 sure that such an application is available. And maybe
13 that's something that could also be an income stream. I
14 don't know, I mean I just don't know enough about that type
15 of thing. I have a droid I would also, you know, get an app
16 for a droid.

17 But I think that's what you mean in terms of --
18 you're in the supermarket, you're in the auto goods place,
19 and you're picking something up and hopefully maybe it says
20 what's in it. And you could go and type that in. But that
21 would require making -- having a very different kind of
22 signaling system for those than you have on this website,
23 which I understand is kind of a -- will create all sorts of
24 problems about, you know, the curation of that information,
25 what kinds of signals it's sending and so on and so forth.

1 Okay, but if your goal is to reach out to the
2 broader consumers you're going to have to do that. Because
3 broader consumers are not going to sit down at their
4 computer and track through and educate themselves about what
5 carcinogenicity means, or what endocrine disruption is and
6 so on and so forth.

7 So, I think there's going to have to be an effort
8 to distill this information, make it salient to people, and
9 make it available to people in the environments in which
10 they use it.

11 And on that part there's lots of people who are
12 out there doing this kind of work. And offline maybe I can
13 hook you up with some of that information, who those people
14 are.

15 The other point I would like to make about how to
16 get people to use it -- I don't know if this -- can I ask if
17 this counts to question one, the thing I'm about to say?

18 CO-CHAIRPERSON RAPHAEL: You -- go for it.

19 DR. MALLOY: Go for it, okay. I'm just going to
20 throw this out. I haven't really thought this through, but
21 it seems to me that when this is said and done you'll have
22 performed a great service for people. Even people who are
23 sophisticated, you're going to save them a lot of time
24 because they won't have to go, you know, they're going to
25 access it; they're going to use it for alternatives

1 assessment; they're going to use it in their businesses, so
2 on and so forth.

3 And it seems to me there's some value there that
4 ought to be captured in terms of revenue. That the statute
5 says make this available to the public. But it seems to me
6 that there's different levels of access to this information
7 that maybe there could be, you could think about a
8 stratified pricing structure. Something that would allow
9 certain access to be free, perhaps subscription services or
10 some other information that would be targeted to more
11 sophisticated users. And if it was a good enough product
12 perhaps people would pay for it.

13 I don't know if people would pay for it or not,
14 but given the economic times in which we live, it might make
15 sense to start thinking, if you haven't already, to start
16 thinking in those terms.

17 I guess that's all I had. Thank you.

18 CO-CHAIRPERSON RAPHAEL: Great. Excellent, Tim.
19 Kelly.

20 DR. MORAN: I've got three major areas of thoughts
21 here. Notes all over the page. And I'm sure everybody else
22 does. And I know you guys have thought about a lot of these
23 things. But I'm hoping that our feedback is going to help
24 you take that next step and figure out how to prioritize all
25 the things you might be doing with this.

1 I do want to support the general trend towards the
2 idea people are using the word portal for various user
3 types. And it might even just be different pages that you
4 could click on that present the same information with a
5 little different way. Because I think that's a way to go.

6 I also think that given resources and time
7 constraints, that you are going to need to focus. You're
8 going to start out and the primary target audience should be
9 those people who are going to be doing alternatives
10 assessments to fulfill the requirements of the regulations
11 that are being drafted.

12 So I really encourage you to think when you're
13 prioritizing what you're going to do, to really focus in on
14 that and try to structure what you're doing hand-in-hand
15 with what's coming out of the regulatory package to make
16 sure that -- it's going to be important that your work
17 proceeds in a way that it will work functionally.

18 But also I think that having the resource that
19 you're putting together at the point of being at least
20 initially available for those people who are doing
21 alternatives assessment will make the regulations feel a lot
22 less daunting. And so I think there's a process need for
23 that, too.

24 When I think about what kinds of portals, you
25 know, portals or ways of looking at this information, are

1 there, the next priority for me, after someone who's going
2 to do a lot of detail on this, is going to be someone who
3 has screened chemicals. And one approach that people take,
4 where they're looking at structures.

5 My experience is with smaller businesses. And
6 they have a completely different way of looking at
7 chemicals. There's a lot of smaller business folks,
8 material scientists and engineers -- not civil engineers,
9 but, you know, materials, folks who are doing -- mechanical
10 engineers and so forth, and they're screening quickly. They
11 don't know a lot of detail about products. So they need an
12 interface that's probably intermediate between what an
13 ordinary consumer might look at, and what those of us who
14 will be doing more detailed alternatives assessments would
15 look at.

16 And frankly, I think they're going to really need
17 a quick screen that gives them some sort of pros and cons,
18 and helps them understand which environmental compartment,
19 which medium if something matters.

20 If they're working on a product that will never
21 get into water, then it doesn't matter if this stuff is
22 incredibly toxic to aquatic life.

23 But if they're working on a product that has a lot
24 of human exposure, they really need to be seeing that red
25 box, and it probably needs to be red, for human exposure.

1 Because a lot of change will occur through that initial
2 evaluation, that looking, I'm putting something together.
3 Are there some things I should just be ruling out right
4 away. There are going to be a ton of people who don't know
5 very much about chemistry and almost nothing about
6 environmental hazard assessment who are going to be looking
7 at these things. And there needs to be, in the not too
8 distant future, a way for them to be able to really screen
9 through.

10 And then the general public, I know you expressed
11 that that's a goal for an audience. And I have a concern
12 about the state trying to take that on, because it's such a
13 different audience. We've had some discussions about that.

14 And so I don't want to say don't ever, you know, eliminate
15 that from your plans, but I would de-prioritize that versus
16 the other ones, just because of the resource constraints
17 that you face.

18 And then you asked for some examples. And I want
19 to cite two. Ann has mentioned the Good Guide and I think
20 that's an excellent example of both an interface that works
21 for consumers and a way of getting to consumers through the,
22 I'm running the store, I'm holding the app in my hand kind
23 of thing. That's just a fantastic example. And I certainly
24 encourage you all to be talking with Ann and the team that
25 developed Good Guide to get some advice on the various

1 levels of things that they did.

2 The other example that is probably more direct to
3 this, for me, is the Pesticide Action Network has developed
4 a database that you can go to. And what's interesting to me
5 about that database is it's the only one that I know of that
6 presents both human health and environmental information all
7 on one page.

8 The summary pages are easy enough to look at, that
9 a broad variety of users can look at it. And even though
10 it's from an environmental group, I found that a huge
11 variety of folks, business folks, government folks, as well
12 as public interest folks, are relying on this database. And
13 I found the information in it to be of good quality.

14 So there's the way it is structured, and the way
15 the interface works, I think, are both really good examples.

16 And I know Susan Kegley and probably some other folks, who
17 was the lead in developing that. Donn, I can send you her
18 contact information offline. But I encourage you to be
19 doing it.

20 Another reason that the PAN database is a great
21 example is they developed it on a shoestring. And you are
22 going to be looking for cost effective ways of doing that.
23 They did what you did, where they drew in data from other
24 sources and so forth. And they did not have a luxurious
25 budget. So they have that experience, too. And I know

1 that's going to be a huge challenge for us, as a state.

2 So, in terms of the organization of the interface
3 so that the screens, and as you were thinking about it, the
4 thing that struck me immediately was the emphasis on human
5 end points and how confusing that might be for a lot of
6 people.

7 So, normally when I -- I'm the eco -- person in
8 the room, I think, and I really focus mostly on water
9 quality and not other ecosystem end points, but normally
10 when I am accessing information source that covers both
11 human and environmental end points, it's structured
12 differently.

13 It's structured with a human set, an eco set, and
14 there's a piece that's missing in that completely. Which is
15 the environmental fate data. Those are just essential that
16 there be a place for not just chemical properties, but
17 environmental fate properties. So photolysis, hydrolysis,
18 biodegradation, all of those things that help us understand
19 the fate of a chemical. Those are just -- having a place
20 for that, whether or not there are data for that, for many
21 chemicals there's a lot of data in that area -- that's just
22 a standard interface would include that.

23 So, I would strongly discourage the approach that
24 you're taking where you've got all those human end points,
25 and then just ecotoxicity. I think it will be very

1 difficult for folks to access when they're doing those
2 alternatives assessment, they've got to think about all
3 those different areas.

4 You're probably going to need to add something
5 that's going to help us deal with things like climate change
6 and some of the other issues that we've brought up, too. A
7 place for that.

8 Another -- just this is more of -- but when you're
9 thinking about lists, please do think about the lists that
10 have to do with environmental impacts. So, just a couple
11 right off the top of my head, water quality criteria and
12 303-D listings. Those kinds of things for not human end
13 points are things that you'd really need to at least have a
14 link for. And that's probably all you do have capacity to
15 do, and I recognize that.

16 I know -- I see you looking a lot to ACToR. That
17 does not work well yet for the environmental end points. So
18 the interface -- I mean it completely exclude the mention of
19 it. And when you try to pull it up and use it as a way to
20 get data from the EPA, you go to ecotox and it doesn't work.

21 So I found that you pull up a chemical and the information
22 simply isn't there. So I'm assuming that's because the
23 database is still in development.

24 But I think you are going to need to go directly
25 to EPA ecotox database. And it's a wonderful thing. So

1 hopefully that'll work out okay.

2 The third one is the hardest comment that I'm
3 going to make. But when folks are doing alternatives
4 assessment they have to think about what environmental
5 compartments. So, air or water, solids, you know, where is
6 it going to wind up. And then assess what's going on there.

7 So somehow we need to be able to help people look
8 at the relationship of the datapoint to the environmental
9 compartment and eventually we need to be able to help people
10 screen that way.

11 I just want to put that on the table. It's a
12 really hard thing to get towards. But I think that should
13 be a goal of the system in the long term, to be helping
14 folks say, okay, in water what are the issues for this
15 chemical. Is there a drinking water concern; is it a
16 concern for aquatic life. In air, is this something that is
17 a problem for climate change or ozone depletion. Or is it
18 an air toxic; is it a problem for humans. How does that
19 work. What -- because each of those, and the way you
20 analyze that, are really different from each other.

21 And that's really hard, but I think it's just --
22 it's going to be fundamental to the long-term future of the
23 use of this information.

24 And then just to wrap up, to emphasize, I think
25 it's going to be really important, as the first part of this

1 develops, to tie this to the development of the regulations.

2 To make sure that we're doing that initial thing to make
3 sure that there's that initial data out there, so people can
4 do the things that the regulations are requiring.

5 And to really emphasize what I think you're
6 already doing, which is to seek partnerships. I think
7 there's tremendous opportunity for partnerships for
8 development of various pieces of this. And some of those
9 partnerships may take awhile to develop, which is I was
10 searching the priority setting.

11 Because what you're doing will have not only
12 national, but international value. It's tremendous. And I
13 really am very grateful that you all are working on this for
14 our state. Thanks.

15 CO-CHAIRPERSON RAPHAEL: Thank you, Kelly. Okay,
16 I'm just going to do a little process check. I have Anne,
17 Ken, Roger, Meg, Tim wants to go again, and Bill. It's
18 10:10. We're going to go to 10:35 and then take a break.
19 Thanks, Mike. And, you know, if -- I mean this question
20 number one is a pretty deep, broad question. So if we need
21 to go after the break, we will. But we'll do a break in 25
22 minutes.

23 And with that, let's go to Anne Wallin.

24 DR. WALLIN: Thank you. I think that was an
25 excellent presentation, Don. I think you guys have a

1 terrific start.

2 I actually think a lot of your navigation makes a
3 lot of sense. At one point you had a slide up that had some
4 check boxes kind of in that main part of the screen, along
5 with that right-hand navigation. I actually don't think you
6 need that. I don't think it's really giving you a lot more
7 information than your right-hand navigation already is.

8 And to Kelly's point, I think that's a good thing,
9 because you have a lot more categories that you're going to
10 have to help people navigate than just the nine. So I think
11 that right-hand navigation is the way to go.

12 I would echo that the red color is probably not
13 the message you want to send when you're just trying to say
14 the information's available. There are other colors you
15 probably don't want to use. You don't want to use green, I
16 don't think you want to use brown. I don't know that you
17 want to use black.

18 You know, I don't know what you're left with,
19 maybe blue. I think you want something very neutral that's
20 just saying there's information available. And I like the
21 option of the grey, because I think that's relatively
22 intuitive to folks, too.

23 The other thing that I would think about in terms
24 of your question, what will encourage them to return, and
25 that's speed. Because if this thing becomes very slow, and

1 the links to these other databases are slow, people are not
2 going to come back.

3 And so while we'd all love to have more whiz-bang
4 features on these things, I think that's something that you,
5 more as IT professionals, are going to have to keep in mind.

6 Because if it drags, people will just check out and not use
7 it. And that would be kind of a tragedy.

8 I think that this really is the first step. And I
9 think you ought to just get it out there. I'm with Kelly.
10 I think it's going to work well for a lot of folks. It
11 probably is going to be a struggle for small and medium
12 companies.

13 I don't think actually it's going to work at all
14 for consumers. I think you're going to have to have a
15 totally different interface. But I think you have to start
16 your journey with one step. And I think this is a really
17 good first step. And so I would just encourage you to kind
18 of make some refinements and let this be the first way on
19 the journey.

20 CO-CHAIRPERSON RAPHAEL: Thank you, Anne. Ken.

21 CO-CHAIRPERSON GEISER: Also seeing the mock-up
22 and all, I find terrific. It's just very exciting and gives
23 me a sense of where we're going, and the amount of
24 possibility that's there. So I appreciate your
25 presentation.

1 Given that Su talked yesterday about these other
2 databases, eChemPortal and others came up, a question that
3 keeps flowing through my mind as I'm trying to deal with
4 this, is what are we adding on top of these portals that
5 already exist. What's California particularly adding?

6 The answers are fairly clear at one level which is
7 because we have these specific set of hazard traits and all
8 that we're looking at, we're able to look at this database
9 or this library of data sources through the lens of what we
10 can put forward in regards to the hazard traits, themselves.

11 So that's one kind of thing.

12 But like eChemPortal and like other of these
13 portals, which are being set up, you know, I don't mean
14 there's another in any way that doesn't speak for my own
15 sense, I'm fascinated with the display of information. And
16 so the display of information I could become obsessed about,
17 because I just find it -- I don't know why, but it's fun and
18 interesting to think about how to display information.

19 It's harder to think about how to use information.

20 And it's harder for me -- I'm less likely to take the user
21 point of view and try to think about it and get anything
22 when I think about it.

23 And I notice that in these, they're sort of --
24 these portals are kind of passive portals that say, I have a
25 lot of information in me, and figure out how to use it.

1 It's not a dynamic conversation between the user and the
2 data.

3 And even though I think what we should have here
4 is a very good portal which allows all the things that
5 you're trying to do, I think that we should think about this
6 as having an architecture that has that, and you can go
7 directly to that if that's what you're looking for.

8 But that there is a kind of other ways to get at
9 the data, which goes through kind of -- the way I'm thinking
10 about it is I go to the library; I get something off the
11 shelf to look at. But as important to me is having the
12 table upon which to look at it and to compare it with other
13 things on the table. So that I got a workspace that I'm
14 working from. And I'm able to use things on the workspace,
15 as well.

16 And I'm thinking the idea that we might have
17 something, we could enter through another way to get to the
18 workspace that allows you to have a place where you can say,
19 take three or four, take benzene and compare it across
20 several different data sources, and see different screens.
21 And be able to say, oh, this screen says it does this; this
22 screen says it does this. I wonder what this one does. But
23 you can have them all displayed at once and you can go back
24 and forth between them.

25 That when we think about the alternatives

1 assessment that there's a application there that is a, I
2 think, I'm hoping that what we do eventually, in a year or
3 so, is we begin to develop templates for how you do
4 alternatives assessments, so that many firms are using sort
5 of common templates, but maybe different templates. But
6 they're on this workspace, as well. So you can go and plug
7 your information into these templates and do work on the
8 templates.

9 I think there's ways to think about -- oh, what
10 else did I -- well, maybe that's some of them. But the idea
11 that there's a set of workplaces that you can go to.

12 Now on the consumer thing I'm a little bit where
13 Anne is, and that is I think we're seeing the proliferation
14 of some really great consumer assistance tools out there for
15 people at a point of sale to try to figure out information
16 about chemicals.

17 I'm not sure that we should try to get there with
18 this database. I don't think that should be the
19 expectation. But I think we ought to recognize that people
20 are going to use this database for those applications out
21 there.

22 So we ought to have a way that those applications,
23 like Good Guide and other things, can plug right up against
24 this thing. So that if you're a consumer, looking for
25 information about the contents of a antifreeze or something

1 like that, you go and look for ethylene glycol, something
2 like that, but then you quickly get told there's a better
3 way to do this by going to this Good Guide or something
4 else. And you plug into that in some way, so that you're
5 not stuck there with all this data that doesn't make a lot
6 of sense. But you find a way to get in that really does.
7 But it's not going through what we're doing.

8 The last thing I'd say is it is useful to think
9 about use data. It's going to be hard. I mean this is a
10 big challenge ahead over the next decade or so, as we work
11 to really begin to build ideas on how we're going to
12 register use data. I know that that's something that the
13 Green Chemistry Initiative has in the future piece and we
14 want to really think about.

15 But there's different ways to think about it,
16 different kinds of use data. There's use data, where is
17 this chemical used. There's also a lot of different stuff
18 about how is this chemical used, which is a different form
19 of use data than is where is it used.

20 And so as we think about how and where, we're
21 going to have to figure out how to plug maybe that data
22 eventually into this, as well. But I see that as kind of a
23 more distant thing.

24 But as Anne sort of said, as a first set of steps
25 I think this is a really good piece. My largest urging is

1 that you think about work spaces and places where you can
2 actually use the data, and we think about that, as well.

3 CO-CHAIRPERSON RAPHAEL: That has really given me
4 so much to think about. That's great. Roger.

5 MR. McFADDEN: I will join my colleagues in
6 thanking you, Donn, and the team for a great presentation
7 and a great start on a very very good product.

8 I call it a product because it is. And when we
9 think about products I think we want to remember that if we
10 want people to keep buying our product or using our product,
11 there are certain very specific things that we always need
12 to build in the product.

13 And I think to the point of why would someone come
14 back to use it again is because it probably brought value to
15 the user, whoever that might be. And it was credible,
16 something credible; had integrity that they felt warm and
17 good about coming back to. So I think that's something that
18 you want them to have a good experience when they touch your
19 product, that use the product.

20 So I'd like to suggest an area, because I had some
21 other notes which I crossed off because you've all, as
22 usual, captured all those great ideas.

23 The one area that I'd like to focus on if I might
24 for a moment is what I call first impression. First
25 impression of a product is often the last impression. The

1 first impression will probably be your summary. And I think
2 I heard you say that you weren't going to write this
3 summary.

4 So what I might suggest, that if you're not going
5 to write it, then set the guidelines for the summary; set
6 the criteria, the do's, the don't's, the things that you
7 want to be sure that's in the summary, without writing it,
8 but, you know, put some guidelines there so whoever does
9 write it that it's consistent. That is has integrity so
10 that when people do use this particular product, that
11 they'll want to come back because it gave them an experience
12 they couldn't get anywhere else but there.

13 It needs to be easy to use. And I know from my
14 years of working with Google, if you look at the Google
15 search engine and that particular process, there's probably
16 a lot to be learned from that. And maybe getting the Google
17 folks, to sit down with them and understand from them what
18 they've gone through to -- I mean, after all, they're
19 dealing with huge, much more information than this. And we
20 think this is gigantic. And they've probably overcome some
21 huge challenges. So maybe reaching out to some resources
22 like that would be useful, as well.

23 Thank you.

24 CO-CHAIRPERSON RAPHAEL: Thank you, Roger. Okay,
25 Meg.

1 DR. SCHWARZMAN: I feel a lot of common themes
2 emerging, and I agree with a lot of them. And that's
3 encouraging to me because I think, you know, we've now
4 gotten enough input, enough of a concrete thing to look at,
5 that lets everybody start organizing their ideas and
6 thoughts around. And it looks like we're coming up with
7 some common ideas. And I won't repeat them because I think
8 everyone gets a sense for a lot of it is California doesn't
9 need to provide the point-of-sale tool, but that it should
10 be possible to create that on top of what California builds.

11 I'm thinking of this as something that tries to
12 do, this being the TSE, something that tries to do two
13 things. One is assemble existing information and make it
14 possible to generate new knowledge from the existing
15 information. And the other is to accept new information.

16 And one of the pieces of new information that
17 keeps coming up is use. And that is going to -- that's like
18 what chemicals are used in, what products chemicals are used
19 in. And that's information that we don't have yet.

20 And so there's sort of a category of how does an
21 information clearinghouse like this get set up so that it
22 can accept that new information.

23 I think what I had in my mind, the term that I had
24 in my mind to refer to, I think what Ken called how
25 something is used is more function. And that will be so

1 what a chemical's function is.

2 And I think that's potentially a way that we can
3 get new knowledge from existing information without
4 requiring new data submission. So that is there are
5 categories of chemical use that exist now, like surfactants
6 or solvents or I kind of had a couple other in mind.

7 But in any case, there are several existing
8 categories of use that when we talk about creating this
9 workspace, to inform -- I really appreciate Kelly's point
10 that whatever tool is created here has to serve the role --
11 serve the function of informing alternatives assessments.

12 So one of the main things that we think about in
13 terms of what has to be done on that workspace is I need a
14 function done. How can I do it better and more safely than
15 I'm doing it now.

16 And so is there a way that we can organize the
17 information within the toxics information clearinghouse that
18 lets you pull up, I want to do this job with a chemical, or
19 I want to do this function. And that's information that may
20 exist now.

21 So not all chemicals are categorizable in this
22 way, but many are. That they perform certain variety of
23 functions. And so maybe that's one type of use data, used
24 how, that Ken said, that could be -- if there are sort of
25 tools that are put on this workspace that could give a lot

1 more function to the clearinghouse than just being a
2 repository of information. That doesn't, as this point,
3 require new information submission or generation.

4 So what I'm thinking about this is like the basic
5 role of the clearinghouse is to do these two things. One is
6 assemble existing data and to make it usable in new ways.
7 And the other is accept new information.

8 The data fall into both of those categories. So
9 use data would be new data that we don't have now. Function
10 data, some of that is available now and we just need to
11 organize it.

12 So, human health toxicity end points or ecotox end
13 points, some of that we have now, and some of it we have to
14 create ways to accept the indicators or the glimpses we have
15 into other ways of understanding that information. I don't
16 know if I'm being clear here. It all made sense to me in my
17 notes.

18 And then the other, the final piece of this meld
19 of existing and new information is what somebody, I think,
20 called meta searches. And that's, I think what Ken is
21 describing on his desk, his workspace, is what kind of
22 information does a user need to extract from this.

23 And it's not just what categories of hazard does
24 benzene fall into. And that's where I think about similar
25 functions, similar performance. So, I'm only collecting it

1 in a new way of -- it was how organized a lot of the things
2 that other people have hinted at.

3 So, which pieces of this require new information,
4 and which are just new ways of organizing existing
5 information, with all in service of the purpose of making
6 decisions. So doing alternatives assessments, or deciding
7 what is more hazardous. Or deciding what to eliminate
8 first. So that's the organization that I was working on in
9 my head.

10 One brief thought that as Kelly was saying, the
11 issue about understanding environmental fate and
12 compartment, I thought of a list of four kind of parameters
13 that I just want to propose, that this information may fall
14 into.

15 One is sort of human health end points. One is
16 ecotox end points. And each of those sort of set of end
17 points has a corresponding sort of fate for monitoring set
18 of information. So it's environmental fate, and you know,
19 compartments.

20 And like you were saying yesterday, Kelly, the
21 tools that we have of detecting that chemical in the
22 environment. And there's a parallel set of information for
23 human health -- for the data referable to humans. So it's
24 biomonitoring information. And some of that is specific
25 biomonitoring findings.

1 And as you were saying, environmental compartments
2 similarly, you know, there's data on this chemical is found
3 in breast milk, or you know, papers on chemicals detected in
4 fetal/maternal unit. You know, that is like an
5 environmental compartment, in a way.

6 So I just divided it in those four ways in my own
7 mind. And thinking of that as are there four parameters,
8 sort of human health end points, ecotox end points, and then
9 corresponding sort of monitoring axes kind of for each of
10 those.

11 CO-CHAIRPERSON RAPHAEL: Thank you, Meg. So just
12 a -- I see, Donn, that you want to -- and Melanie wants to
13 respond. What I'm going to do to manage the input is get
14 response back from staff. Then I'm going to ask that Tim
15 and Ken wait until everyone's had a chance to do one
16 comment. Then we'll come back. So, everybody will be able
17 to comment. It's just I'm going to move the order around a
18 little bit.

19 No, no, no, you can keep it up, but I just am
20 making a note of that.

21 So with that, it looks like Donn wants to speak
22 and then Melanie is next.

23 MR. DIEBERT: As you mentioned earlier, Maziar
24 mentioned those six planks, Su mentioned those six planks.
25 One of those planks is chemical products. And that's what

1 we're gearing on. When the regulations get completed, we'll
2 have information and be able to interface with the
3 clearinghouse. So you'll have what chemicals are in what
4 products. You'll be able to go to the clearinghouse and be
5 able to have that information brought up, and understanding
6 in that respect.

7 So we are, you know, trying to get all this
8 together and the clearinghouse is a foundation where a lot
9 of those planks we'll expand upon and build upon.

10 CO-CHAIRPERSON RAPHAEL: Thank you. Melanie.

11 DR. MARTY: Just a couple comments. One on the
12 environmental -- and exposure issues. There are databases
13 in California on specific subset of chemicals monitored in
14 the air for the last 20 years. Those databases are housed
15 at CARB. There could be like a little link to that.

16 Ditto the State Water Resources Board has well-
17 water monitoring data that they've been conducting since '83
18 that might be useful.

19 And then when I'm hearing environmental fate,
20 there is a model DTSC had developed, actually Tom McCohn
21 developed, CalTox, of a gas-- based model that, you know,
22 there could be a plug-in to go to that. All you need is
23 the physical chemical characteristics as a compound, and you
24 can plug it into this model to at least get an idea of where
25 a chemical, once released, might end up.

1 And you know, just another little point about
2 that. There are some toxic air contaminants when you look
3 at the vapor pressure you go, wow, that's not a very high
4 vapor pressure chemical. But they're released at high
5 temperature and/or pressure, making them airborne.

6 So there are all these little caveats that have to
7 get thrown in there. But a link to CalTox might be very
8 useful.

9 CO-CHAIRPERSON RAPHAEL: Okay, so here's what I'm
10 going to do based on my age, is I'm going to break now. And
11 it is now 10:32. So just, my age meaning biobreak needs and
12 need for round numbers.

13 So, we will come back at 10:45. And then we will
14 pick up on my order, okay. So keep your cards up and we're
15 going to come back; finish off question number one; and then
16 move on from there. Okay.

17 (Brief recess.)

18 CO-CHAIRPERSON RAPHAEL: Let's reconvene. So,
19 with that -- but I do want everyone to hear what everyone
20 else has to say, because that's where this gets such fertile
21 discussion.

22 All right, so what we're going to do is I have
23 Bill, Mike and Art. And then we're going to go to Tim and
24 Ken and see if we're ready to close question number one.
25 And I have some thoughts on it, as well.

1 So, with that we'll go to Bill.

2 DR. CARROLL: Thank you, Chair. What I first
3 wanted to say is, Donn, I'm glad you're doing this and not
4 me, because I don't think I'm smart enough to do this kind
5 of work.

6 I was listening to the discussion yesterday and
7 today, what sort of set this off in my mind partially is
8 Tim's vision of an iPhone app for instant alternatives
9 analysis. And I wondered of the complexity of that sort of
10 thing. And particularly the complexity of what we're going
11 to be talking about for consumers. So in this I'm kind of
12 echoing Ann and Ken. But I want to take it a little bit
13 further.

14 When you have the need on websites like the
15 American Airlines website for live chat to talk to somebody
16 about how you make an airline reservation, because that's a
17 little daunting, I'm wondering when you present page after
18 page after page of information, some of which will be
19 conflicting in lots of different areas, just how useful you
20 can make this sort of thing for an at least nonpartially
21 expert consumer.

22 And perhaps there is a way. But if I were
23 offering you advice, I would concentrate on the
24 practitioner. And leave the other sorts of things for the
25 after-market.

1 Where you are it would almost cost you less money
2 to set this up as OnStar and let people call you and tell
3 you what their question is and you answer it.

4 I started out being facetious, but I've come to
5 the conclusion that if you cost the two things out, the
6 number of the people that you would be employing on the
7 other end of that live chat might cost you less than finding
8 out how to make this consumer friendly for exactly the kinds
9 of question the consumer will ask.

10 So that's pretty much what my counsel on this is,
11 is make this work for the practitioner and leave the stuff
12 for the truly nonexpert or nonexpert-oriented consumer to
13 the after-market.

14 Thank you, Chair.

15 CO-CHAIRPERSON RAPHAEL: Thank you, Bill. Okay,
16 Mike Wilson.

17 DR. WILSON: Okay, thank you. Again, Donn, thank
18 you very much for that presentation. And I have just three
19 thoughts, and then a couple of questions. I had a question
20 for Tim and Kelly.

21 But the first -- so the first is that getting to
22 your point about where we're headed with this is toward
23 product information. And, you know, we've talked before on
24 this panel about this triangle of information that's needed.
25 Hazard data disclosure by producers; hazard evaluation of -

1 - hazard evaluation; and then product ingredient disclosure.

2 And I think, you know, as it is right now we're in
3 one of those ends of the triangle, which is our certain
4 hazard information evaluation, and trying to decide that
5 information as a service that we provide the public.

6 We don't have product information disclosure yet.

7 I think that's an essential piece that will require the
8 involvement of the legislature. Because it's just simply
9 impossible for us right now. We don't have that information
10 available to us, both in terms of ingredient disclosure as
11 well as proactive reporting by producers on what products
12 are being sold in the State of California.

13 So just for the record I wanted just to state
14 that, something that we're going to need to meet this
15 objective.

16 Secondly, you know, this question has come up
17 about use information. And, of course, you know, product
18 disclosure is a big piece of that. Product disclosure
19 reporting by manufacturers is a huge piece of that.

20 But it's possible that we can sort of pilot test a
21 piece of this with CalEPA's reporting process that -- as I
22 understand it, because now they've gone electronic. So we
23 had electronic data before -- in the state. And a year and
24 a half ago that infrastructure was finally put in place for
25 counties, for -- to gather and submit and centralize and so

1 forth, information on substances onsite in locations, you
2 know, businesses across California.

3 It's kind of a crude measure of use and volume of
4 materials, of chemicals moving through the state. But it's
5 a database that's under development by CalEPA. And it may
6 be a way to -- there may be a way to just begin bringing
7 that into this database. That's sort of a first step in
8 getting toward this use information.

9 And then -- I'm going to disagree here with Bill.

10 I think the role here is to serve small- and medium-sized
11 businesses, the public, public interest groups, consumers
12 that don't have the resources of California's largest
13 businesses. The largest businesses in the state are going
14 to have the, you know, they're going to have the staff and
15 technical expertise to do a lot of this work on their own.

16 And the big group that we're not meeting are the
17 tens of thousands of small- and medium-sized businesses in
18 the state where they're trying to run businesses and make
19 these decisions at the same time.

20 And then, of course, public interest groups and
21 labor groups and so forth that are trying to meet the needs
22 of their members in making decisions.

23 And I guess what I worry about, I guess this sort
24 of actually does get to Bill's point, that we have -- we're
25 developing a very useful database, a library, if you will,

1 and we can leave the interpretation of it to the end, sort
2 of the after-market.

3 But I think we would do the greatest service if we
4 could -- the danger is the people that we work with in labor
5 and so forth, is that as you go through these lists you sort
6 of throw up your hands and say, well, they're all toxic in
7 one way or another. And none of them are really any better
8 than any others. And so you sort of give up. None of a
9 good decision-making algorithm, as well.

10 And so Ken brought up this point of how do you
11 display information that's useful for people. And in a way
12 that allows people to make comparisons. And that requires
13 us to do some interpretation.

14 But, you know, there's actually a really
15 interesting book called "Materials Matter". Ken might know
16 about that.

17 (Laughter.)

18 DR. WILSON: And one of the things that Ken did in
19 that book that we found very useful, that we reproduced for
20 our report to the legislature was a first cut of taking a 2-
21 by-2 table, and across the top was persistence, and across
22 the other axis was toxicity.

23 And the things that landed in high persistence and
24 high toxicity were obviously the worst ones. And, you know,
25 the chapters leading up to that there's a lot of information

1 on persistence and toxicity and so forth. But that graphic
2 illustration says so much about, oh, yeah, this is what we
3 want to move away from these, and we want to steadily move
4 toward the upper left of this 2-by-2 box.

5 And obviously you get to all kinds of questions
6 about how you weight toxicity in that kind of an
7 illustration. But I just would encourage that, moving in
8 that direction where there's -- imagine that kind of
9 information where either chemicals get displayed, products
10 can be displayed in that kind of graphical interface,
11 graphical illustration, so we can begin comparing.

12 And, you know, you can imagine a small
13 businessperson going in looking at 35 different products.
14 And, again, this kind of gets to Meg's point about usage,
15 you know, 35 different products in there. So laid out,
16 ultimately, we have the information, displayed graphically,
17 across these different parameters.

18 That seems to be the direction that we would want
19 to go ultimately. And maybe that will dictate, to some
20 extent, how the information -- database gets put together.

21 So then I just had two questions. One was for Tim
22 about what was it that the UCLA study learned about workers
23 use of the MSDSs under the hazard communication standard.
24 Because that was an effort to drive the information into the
25 hands of users for this purpose in many ways.

1 And then Kelly, on the PAN website, how is it that
2 they -- or do they deal with this issue of -- you know, the
3 problem of trying to rank different chemicals or pesticides.

4 Or do you sort of run into the same problem of well,
5 they're all toxic in one way or another, so none of them are
6 any better than any of the others.

7 So, those are the questions --

8 CO-CHAIRPERSON RAPHAEL: It's not all --

9 DR. WILSON: I'm sort of throwing out --

10 CO-CHAIRPERSON RAPHAEL: No, so it's cool, and I
11 see Richard's up there. So, Tim, I'm going to let you
12 answer that when you -- you can add it to your comments.

13 Kelly, can you address it very quickly?

14 DR. MORAN: Yeah, I don't think it really
15 addresses that well, so what you're raising is something
16 that I don't, you know, -- the best example I can think of
17 is things like, you know, comparison when you're shopping
18 for something. Those little check boxes when you want to
19 compare two washing machines.

20 DR. WILSON: Okay.

21 CO-CHAIRPERSON RAPHAEL: Okay, so now we've got
22 Art and Richard and then Tim and Ken.

23 DR. FONG: Thank you very much. And that was just
24 an excellent presentation, really appreciate it. Can't help
25 but notice that Roger's comments yesterday seem to have

1 driven Julie away --

2 (Laughter.)

3 DR. CARROLL: It was your comment.

4 DR. FONG: Let me continue to pick up on Roger
5 just a little bit. In terms of first impressions and
6 chemical summary and the importance of it, I totally agree
7 with him. But the concern that I have is that by pulling
8 this chemical summary from different sources I think it
9 might be somewhat confusing, if not misleading.

10 And the reason for that -- and, again, even given
11 the suggestion that Roger made about, you know, having
12 transparent guidelines and rules about what can go into the
13 summary, it's that when you're pulling it from different
14 sources you're going to get a different picture of what, you
15 know, the chemical concerns might be.

16 So, for example, if you pulled it from OSHA or
17 NIAJ type database, the summary is going to be very
18 different than if you pulled it from, let's say, the EPA
19 IRIS or even some of the ecological databases for summaries
20 that, you know, Kelly mentioned.

21 So, even if you were to have, you know, qualifiers
22 in there, or average, looking at your portal, it's going to
23 be hard to tell where that came from. So sometimes this is,
24 you know, occupational concerns, and sometimes it's going to
25 be, depending on where you got that, it might be, you know,

1 more let's say groundwater concerns where, you know. So
2 that might be confusing -- requesting, oh, that's a major
3 area of concern.

4 So ideally, you know, I'd like to see OEHHA or
5 DTSC do the summary. But given the budgetary constraints,
6 so I think we have to try to resolve that somehow. I think
7 that might be important.

8 Second point that I wanted to make is about
9 something that Ann mentioned about, you know, people coming
10 back and about the speed of websites, you know. Obviously
11 the team has done a number of studies, you know, looking
12 into what turns people off about the use of websites and
13 inactive components.

14 And one thing that's important is that speed is
15 just absolutely critical. And what's really interesting is
16 that younger users tend to be less patient than old geezers
17 around this table.

18 (Laughter.)

19 DR. FONG: So I think the fact that Dale can help
20 us, you know, with his undergrads, I think that's really
21 important.

22 And, you know, again, in terms of inactive type of
23 portal, many of the suggestions that Ken made I think was
24 excellent. But unfortunately, they do slow things down. So
25 in order to incorporate Ken's suggestion you need to have

1 fairly high-power IT support. So you might need to keep
2 that in mind in terms of, you know, who you partner with.

3 And I actually also have a question about
4 partnerships. When you say partnership, are you referring
5 to, you know, people helping you out on a pro bono or just,
6 you know, type basis? Or are you talking about actually
7 paying for, you know, expertise?

8 And the very last point that I want to make about,
9 and people using this particular website, it's visibility.
10 Somehow you have to make it, I don't know, advertising for
11 the Super Bowl or something.

12 Because, you know, Melanie mentioned the fact that
13 about CalcOTs and how, you know, it's such an excellent tool
14 for this assessment. And I find it to be just amazing. But
15 at the same time, virtually nobody knows about it. I mean
16 even among experts on this panel.

17 So just because you've a really powerful tool
18 doesn't mean that, you know, it's going to be useful in the
19 sense of number of users actually knowing and using it.

20 So I think it's important to come up with some
21 mechanisms that increase the visibility. Thank you very
22 much.

23 CO-CHAIRPERSON RAPHAEL: Nice, Art, thank you. So
24 the next is Richard.

25 DR. LIROFF: I just want to second Art's excellent

1 points just now about the dilemmas of where you pull the
2 summaries from. I was going to use a different example.

3 Suppose you have an entry on bisphenol A and
4 you're looking to authoritative summaries. You know, do you
5 pull them from the National Toxicology Program in the U.S.,
6 or do you pull them from the European Food Safety Authority.

7 And I don't think that you can referee between
8 those two. And by the same token you don't have the
9 resources to write your own summary.

10 And I don't know how we get past this dilemma. I
11 mean I do think that a person hitting that homepage, I think
12 going into a chemical the first thing they're going to look
13 at is what does the summary say.

14 CO-CHAIRPERSON RAPHAEL: I'm sorry, I didn't hear
15 what you just said.

16 DR. LIROFF: I'm sorry, --

17 (Parties speaking simultaneously.)

18 DR. LIROFF: Okay. You know, the first thing that
19 the user will look at is the summary, especially the person
20 who is not expert. And I think there are risks there, or
21 maybe I should say there's a high hazard there of the non-
22 knowledgeable or nonexpert user coming away with an
23 impression which is very incomplete impression. But short
24 of pouring lots of resources into this enterprise to create
25 summaries from scratch, I don't see any way around that.

1 In terms of the comments of Mike and Bill on who
2 the users are, I come down on Bill's side, that this really
3 is, as much as we might aspire to serve the needs of
4 consumers and small- and medium-sized enterprises, again,
5 given the resources, and given other options like Good Guide
6 and the like, I think we do have to focus on how we best
7 serve the needs of practitioners.

8 Now, I have a big question mark in my mind around
9 the needs of small- and medium-sized enterprises. You know,
10 SMEs are invoked all the time. I don't know if there's any
11 representative of SMEs. This is not a stakeholder panel,
12 it's a scientific expertise panel, but I don't know if
13 there's anybody around the table who's in a small- and
14 medium-sized enterprise.

15 But I do find myself wondering where do they go.
16 Do they go maybe to their trade associations in the first
17 instance? Do they go to the trade associations of the
18 vendors? I mean it's an intriguing question, how are the
19 needs of SMEs satisfied.

20 But I don't know that necessarily a person trying
21 to get an answer would, in fact, come to this database. You
22 know, I just wonder what the alternatives out there that
23 they're looking for. I don't know, and I'm just curious if
24 anybody around the table does have any insight into the
25 answer to that question.

1 DR. OGUNSEITAN: Can I ask Richard and Bill what
2 the definition of a practitioner is?

3 DR. CARROLL: I guess since I'm the one who
4 brought the term up, I imagine a practitioner as someone who
5 could look at all of the information that is presented for
6 material, and in making comparisons weight things
7 appropriately for a use that it's intended.

8 To me that's a way -- and my thinking, this is my
9 point, I agree that you need the interpretation. As I
10 understood your comment you're saying the state needs to
11 provide that interpretation.

12 But you have to understand where it's going to be
13 used and in what context in order to do that. And that is a
14 much more interactive sort of thing.

15 So what I imagined is, and maybe I'm looking at
16 this for the full -- scientists, but I'm looking at the
17 practitioner as someone who knows how, knows what the
18 categories are, knows what the information means, knows what
19 the use is going to be, and is able to provide something
20 more of a customized answer, or an interpretation through a
21 particular lens for people who would use it in a particular
22 way. That's what I meant.

23 CO-CHAIRPERSON RAPHAEL: Okay, and I would just
24 say to Rich that I would think that I represent a small-
25 medium enterprise, as a local government. And so how do we

1 do it right now is we hire consultants on a really limited
2 basis to help us get the information. We ask the state to
3 help us because we aren't good at getting that information.

4 So that, to me, that would be an example of that.

5 I don't know the business model on that.

6 Okay, Maziar.

7 DIRECTOR MOVASSAGHI: Following our conversation
8 about what would private partnerships, some of these small-
9 medium companies, and just so you know for definition
10 purposes, the medium ones are say more than 20 to 50
11 employees and a gross receipt of more than a couple million
12 bucks. So not super-small startups, but not big folks,
13 either.

14 One of the interesting things that they told me
15 was they can't go to their trade association because
16 sometimes what they're looking to get answers on is what
17 they view as their confidential business information.
18 That's how they separate themselves from existing providers
19 of that same product.

20 So, what they really came to us was they wanted
21 the public/private partnerships to be the places they can go
22 to. Someplace that they're not going to be divulging their
23 confidential business information to a competitor, but a
24 trusted body that's also not a regulator. They made it very
25 clear they don't want to talk to the regulator, don't want

1 to talk to this grey area in between.

2 So that's where they're going to go get
3 information. And I'm wondering whether, when you were
4 talking about customized information, would that have to be
5 the person that's working in the company to be so customized
6 that you're talking about? No.

7 I saw this as an entire range of it could be an
8 individual consultant who answers a specific question. It
9 could be an NGO that from a particular point of view
10 provides a ranking of materials for a particular use. So
11 it could be an individual; it could be an organization.

12 The main point was, and I think -- I'm trying to
13 go back to the statute and understand what was being asked
14 for -- is to have a place where you can go to get the
15 information as raw material that you, as a practitioner,
16 value-add into a particular application. Even if it isn't
17 one-of basis, even if it's -- we've looked at this number of
18 chemicals and these applications. Here's our consumer
19 reports ranking.

20 But one way or another someone takes the raw data
21 and value-adds to it for a particular purpose or a
22 particular audience. That's what I meant. And those people
23 will find this very useful.

24 I think it will be extraordinarily difficult,
25 particularly for things we're going to get to, what's the --

1 how would you treat things differently if they're data-rich
2 or data-poor. I think it'll be extraordinarily difficult
3 for a consumer to deal with things that are data-rich, and
4 particularly where you have -- data, and you have to weight
5 things differently.

6 So that's where my comment's coming from. And I'm
7 sorry for the long intervention, but that's what I meant.

8 CO-CHAIRPERSON RAPHAEL: Okay, so here's what I'm
9 going to do. We've got -- everybody with a card up now has
10 already spoken. Art, you can put that down.

11 So who's the person with the one-minute cards for
12 public comment? Can you come over here and stand in front
13 of whoever's speaking? Because what we're going to do is
14 each of you get one minute. So she's going to give you the
15 zero when the minute is up, okay? Because I can't -- I
16 don't want to look at my watch, I want to listen to you.

17 So we've got Tim, Ken, Kelly, Mike.

18 MS. SPEAKER: Debbie, we're still on question one
19 sort of?

20 CO-CHAIRPERSON RAPHAEL: We're still on question
21 one. I want to close this, as you can probably see, so that
22 we can end on time. Okay.

23 DR. MALLOY: I'd like to ask for more than one
24 minute since I have to -- Mike asked me a question --

25 CO-CHAIRPERSON RAPHAEL: You're already losing

1 time, Tim. Sorry.

2 (Laughter.)

3 DR. MALLOY: Then I'll just run over. I want to
4 clarify number one, my point was not that DTSC develop an
5 ap. But that DTSC should be very active in trying to make
6 that happen.

7 And this leads to my major point which is I find
8 it very concerning that it seems like the majority of folks
9 in here are viewing this toxics clearinghouse as a tool for
10 practitioners. It certainly should be available for
11 practitioners. It would be a useful tool.

12 But frankly, I think the practitioners around this
13 table already know about the databases that are available,
14 know how to use them. And while this would make their job
15 more efficient, I don't think that it serves -- that is in
16 any way, you know, what was envisioned in the statute.

17 I don't think the goal was to help it make things
18 easier for practitioners. I think that public means public.

19 And that there is a lot of potential in the use of the new
20 media, including this website and what might flow from it to
21 both educate consumers and empower consumers in making
22 decisions.

23 I think limiting it to practitioners kind of takes
24 us down that conventional path that we've always had, where
25 the consumer is left out. And I think that many of the

1 programs that are available right now, you think about
2 nutrition labeling, you think about PRI, you think about
3 Prop 65, at least when it was in its younger years. Does
4 show that the public can make -- it can make a difference
5 with the public having information.

6 I really, I have to say I think there are some
7 mischievous outcomes that might occur in the path that we're
8 taking. There is a relationship between the clearinghouse
9 and the regulations in two ways.

10 The first way is the hazard traits are supposed to
11 be considered by DTSC for prioritization. We talked about
12 that yesterday.

13 The second is certainly it would be a tool for
14 alternatives assessment, but I think it would be dangerous
15 to try and say that the clearinghouse would develop either
16 the process or build the box of what information would have
17 to be considered in an alternatives assessment.

18 And for this -- Donn didn't get a chance to talk
19 in great detail about this, but I got the sense that there's
20 going to be somewhat limited group of information included
21 in this. And it's not clear to me whether peer-reviewed
22 reports, which haven't been kind of incorporated into the
23 other existing databases already would even be included in
24 the clearinghouse.

25 And if that's true, to me that seems to be a real

1 deficiency if we were going to view the clearinghouse as the
2 universe of information that ought to be used for
3 alternatives assessment.

4 CO-CHAIRPERSON RAPHAEL: Okay, thank you. And
5 actually I think that is actually getting into one of the
6 next questions about defining sources. So we need to get
7 back to that. And we're going to have to learn about MSDSs
8 offline.

9 So, the next is Ken.

10 CO-CHAIRPERSON GEISER: Speaking quickly. Goes
11 back to this idea of thinking about the users. I think we
12 ought to understand that this is a database that we're
13 building for say 2020. This is not -- it's going to take us
14 awhile to get it up. As people who are going to be using
15 this maybe a decade from now.

16 So I'd look at how people are using the internet
17 and everything else at this point. And really think about
18 if you want to talk about how and what's going to bring you
19 back to the database, it's making the database feel like
20 it's part of their lives, part of what they engage in and
21 comment toward.

22 So I urge that maybe we also think that there are
23 places in the database where people can make comments on the
24 chemicals, on the studies, on the data, itself. Such that
25 not just on the database, but on benzene. There ought to be

1 a place where people can load their knowledge about benzene
2 and add to it, as well.

3 And it may be even in a WIKI -- that it's a format
4 in a WIKI. California has pioneered in the last couple of
5 years some very interesting WIKI uses of this that we ought
6 to understand that that ought to be in here, too, so that
7 people feel like benzene's my chemical and I'm commenting
8 upon it. I'm reading the blogs about it. And I'm there
9 engaged in it.

10 If the Europeans are right, there's about 143,000
11 chemicals that are going to show up on these kind of things.

12 California could have 143,000 people each with one chemical
13 that's their chemical. And they are engaged in the dialogue
14 about that chemical. I would love to see that kind of
15 thing, participatory, engaged, excited feeling about this
16 database, so.

17 CO-CHAIRPERSON RAPHAEL: Thank you, Ken. Kelly.

18 DR. MORAN: Just quickly I wanted to respond to
19 the question Mike has about small and medium businesses.
20 I've done a lot of work with medium businesses, and a really
21 great example to understand how the needs of medium
22 businesses is the brake pad manufacturers. They are
23 formulating brake pads with copper in them, and that's
24 causing widespread water pollution problems across the
25 country.

1 And there were two gaps in what they knew. One of
2 those gaps would be solved here, and the other one would not
3 be part of this database.

4 So this database needs to be able to provide
5 information that folks from medium, particularly medium, and
6 even small businesses can at least access them, how to
7 understand the impacts of their products.

8 So we have to make the interface friendly enough
9 to do that. And there I talked about a screening screen.
10 But I'm hopeful that you can get to the point at which they
11 can do that.

12 The second part is a piece that would not be here
13 which is that small-medium business folks, particularly
14 those who don't have someone who's an environmental expert
15 on staff, which is common in those kinds of businesses -- a
16 safety officer, but they don't have somebody who knows about
17 environmental impacts.

18 They don't know where their product is going in
19 the environment. And so they don't even know. When I
20 started working with brake pad manufacturers and I was
21 having to meet with other business groups, they had no idea
22 that their product got into water.

23 Now this seems plainly obvious if you work in a
24 watershed and see something disbursed all over the urban
25 environment, it's going to wash off. But, it was not

1 plainly obvious to them.

2 That is a second need. And I think that second
3 need is actually probably where the public/private
4 partnerships go this going already. And understand
5 premodeling tools and things, help people understand where
6 their products go. So then they know which pieces to work
7 in this database.

8 But that was why I brought up the need to help
9 people understand what medium they're in, what medium you're
10 thinking about for each of those various points. Because
11 they have to be able to make that match to make it work.

12 CO-CHAIRPERSON RAPHAEL: Thank you, Kelly. Mike.

13 DR. WILSON: I want to underscore Tim's point here
14 that the intent behind this and its linkage with AB-1879 was
15 driving a behavior change in the market. And favoring, over
16 time, the production and sales of safer products in
17 California. Part of which we learned about this enormous
18 void between information from producers to the users of
19 their products. And that we're trying to bridge that gap.

20 And that requires distribution of this information in
21 its daily application.

22 And so it may be that the linkage here, what
23 Bill's point and what at this point is that DTSC is the
24 after-market interpreter for this information that is driver
25 information that's being developed. And that it's the role

1 of DTSC to interpret that information in a way that's useful
2 and will say for SMEs, for example.

3 My experience with SMEs, I was in the vehicle
4 repair industry in California. And that was, you know,
5 narrow but fairly deep experience. 100,000 employees,
6 35,000 shops across the state. One of the fastest ten
7 growing trades in the state.

8 And the owners of those shops got their
9 information on the hazardous properties of the products they
10 were using from their distributors, from the Mack Truck guy,
11 literally.

12 And when they tried to get information from their
13 trade association they found that the trade association
14 didn't have that, didn't have anywhere near the kind of
15 information that they were looking for. Relative safety of
16 products.

17 CO-CHAIRPERSON RAPHAEL: Thank you, excellent.
18 Excellent. Okay, so I just want to say my one point on this
19 subject and then we'll close number one. Oh, Roger, you
20 want a one-minuter?

21 MR. McFADDEN: Yes.

22 CO-CHAIRPERSON RAPHAEL: Okay, then you really get
23 one minute, so look at her when she's speaking.

24 MR. McFADDEN: All right, I can do that.

25 CO-CHAIRPERSON RAPHAEL: All right.

1 MR. McFADDEN: I'm troubled -- I'm a little
2 troubled on something, and it's this. And I direct this to
3 DTSC. Please know that this individual believes this
4 database should be targeted for users.

5 Using an example, real quick. My oldest daughter
6 was diagnosed with a very serious eye disease a couple of
7 years ago. And I am not a medical practitioner. But when I
8 found out about that I did a lot of research to find out
9 about that disease, and became pretty knowledgeable about
10 that disease, because it was very special to me, and very
11 personal to me.

12 And I don't -- I wouldn't want you to think that
13 we're so elite that we have all the answers and we're the
14 only ones who know. We need to be able to share this
15 information openly.

16 Also -- this is my last ten seconds -- my 88-year-
17 old father called me on the phone after he'd learned about
18 this. And said, I went on the internet and I learned about
19 this disease. He was 86 years old and he did a pretty good
20 job of articulating to me what he learned.

21 So, that's what I have to say. I would encourage
22 DTSC to make this database open.

23 CO-CHAIRPERSON RAPHAEL: So I'm hearing don't
24 underestimate the need and the power of the public for this.
25 I hear this over and over again.

1 Sharing one personal thing that we had in San
2 Francisco is we did an incredible partnership with Cisco to
3 do an amazing interactive database based on zip code. We
4 dialed into PG&E information; we dialed into all these
5 databases to give environmental feedback to our residents.

6 We had no idea how to do that. We needed Cisco to
7 come in. And they did it pro bono. And they did it because
8 the president of their company was interested in the Clinton
9 Climate Initiative. Okay, so that's not our capacity for
10 that.

11 So I would just say to Maziar that if the Governor
12 really is interested in this and wants to help DTSC
13 implement this incredible opportunity, then maybe he might
14 have a meeting with Cisco or Google. Because there's no way
15 they're going to pick your calls up when you ask for a
16 partnership.

17 So I think that is -- but it's amazing, because
18 what you're going to have to do is design this for 2020,
19 which means have an architecture that works, right. Don't
20 have barriers built into the system for future applications.

21 And that's the thing that our IT guys couldn't
22 figure out as well as the IT guys from Cisco.

23 All right, so having said that, we have two
24 questions that are incredibly interesting and deep. We do
25 not have hours of time. We have about 25 minutes.

1 So what I'm going to do, with my colleagues, is
2 say you choose either one, but just identify which question
3 you're doing.

4 And really the questions are how do we group
5 sources. Because, you know, and I think Ken was starting --
6 I interpreted that he was starting to go down the path of
7 there's various credibility of sources; there's various, you
8 know, how do we communicate that.

9 And then data gaps. How do we communicate
10 information, lack of information.

11 So, with that I will just open it up to a new
12 list. Anybody have thoughts? Okay, Ann.

13 DR. BLAKE: I'll do the second question quickly,
14 about data sources. This probably isn't as transparent as
15 it could be in Good Guide. But we dealt with -- we've taken
16 all the publicly available data very much the same databases
17 you're looking at, general consensus, we're all using the
18 same ones.

19 We've weighted them a little bit differently, so
20 that was sort of our data quality weighting. So that's one
21 way of dealing with, you know, so we can talk about how you
22 want to do that.

23 But I would encourage it to be even more
24 transparent than we've been able to do it, so.

25 The second thing, as I guess one of those

1 practitioners that Bill's talking about, in terms of
2 presenting lack of information. That's actually useful
3 information for those of us who are making choices among
4 materials or technologies.

5 But if we could present it in kind of what I was
6 picturing Ken's workspace being, or what Kelly was referring
7 to as you're trying to buy a different washing machine, if
8 you have gaps in information and they're highlighted, many
9 of us are making daily decisions based on grey areas. I've
10 heard this from, you know, HP even of the material choices
11 that they make.

12 It would be helpful if we had sort of a graphic
13 representation. I think Mike was talking about it, as well.

14 All the empty places, all the grayed out areas where there
15 isn't information, we found when we did this analysis for
16 the City of San Francisco with OEHHA, dry cleaning
17 technologies that there were things that fell into the
18 obvious reds, you know, things that we didn't want to use.
19 We had enough information to know they were hazardous. We
20 had enough information to know the preferable technologies.

21 And then there was this whole gamish in the middle where
22 there was incomplete information.

23 But the fact that there was incomplete information
24 in certain areas was plenty for us to make a decision about
25 how to rank those options.

1 So, that's -- yeah, I think that's how I would
2 leave it.

3 CO-CHAIRPERSON RAPHAEL: Thank you, Ann.

4 DR. BLAKE: Oh, actually one quick thing about
5 summaries. This is an imperfect solution, at best, with the
6 issue about where summaries come from. If you can have a
7 hierarchy of sources that you like best, that are the most
8 reliable. And then take the resources that you have and
9 write your own summaries of what's out there. If there's
10 conflicting data, there's only going to be a handful of
11 things for which that comes up.

12 Again, this is not a perfect solution. We tried
13 to do this for Good Guide, summarizing in two sentences with
14 data on phthalates, parabenz, you name it. It's not
15 straightforward, but that's one way you could focus those
16 resources.

17 CO-CHAIRPERSON RAPHAEL: Mike.

18 DR. WILSON: Donn, looking at your -- oh, lord --
19 (Laughter.)

20 DR. WILSON: Looking at your table that had the
21 bars, -- little bars, and your attributes across the top.
22 And then you have check marks based on whether the data are
23 available under these different sources.

24 That, I think, gets at what Ann is describing. I
25 thought that was, you know, very useful. And yet when I

1 read end point information available, I didn't know that was
2 that it was simply because DTSC couldn't find it, or if it
3 was just simply not available in the world, you know.

4 And so my suggestion is that as you're thinking
5 about the check boxes for -- solid dots if there's no
6 availability, no data available. Something that's more
7 graphical. Some people have used a green dot for good
8 information, yellow dot for, you know, some information, and
9 red red for no information.

10 That then gives you this kind of texture that's
11 rapidly -- you can rapidly interpret it.

12 CO-CHAIRPERSON RAPHAEL: Dele.

13 DR. OGUNSEITAN: Thank you. I've had some
14 interesting searches on Google, talking about partnership
15 with Google. And occasionally I click on what they call
16 Wonder Wheel. And it gives you the search key word in a
17 circle, and lines to other key phrases that are relevant to
18 that particular topic.

19 And then you can click on the different lines to
20 search for relevant information. And if it's a key word or
21 phrase that's not readily available in the literature, you
22 don't have as many lines.

23 It's a very good visual communication of how much
24 information that you have. Which is better than just the
25 number of hits, which is another way to do it on the search.

1 So when you click benzene, how many hits do you have in
2 this particular database.

3 That would also be useful to put into the page.
4 But it doesn't tell you how to organize. The Wonder Wheel
5 helps you organize the information in a way that could be
6 useful.

7 CO-CHAIRPERSON RAPHAEL: That's cool. Bill.

8 DR. CARROLL: Thank you, Chair. And this kind of
9 goes, I don't know which of these two questions it responds
10 to, but it goes to a concern that I have if I were sitting
11 in your chair doing this. Recognizing that what we've seen
12 up to this point is kind of -- and I know you're not limited
13 to this, but kind of mining databases that already exist,
14 that are already an aggregation of information from
15 someplace else. In some cases they may be databases of
16 databases of databases.

17 And every time you get another step removed from
18 the primary information there is an opportunity for error
19 and for old information. I firmly believe there is no
20 spreadsheet in America that does not have an error in it.
21 And transcription errors somewhere along the line. Someone
22 transcribed information from one medium to another, and
23 there will be transcription errors.

24 So, my thought is get as close to the primary
25 information as you can when you're taking it and

1 transferring that information.

2 To some extent, particularly when you have
3 conflicting primary information or you have experiments that
4 go to the same thing but are done slightly differently,
5 you're going to have to ask yourself the hard question about
6 how much curation and interpretation you're going to do of
7 that data.

8 And knowing the size of the problem, if you do any
9 at all, and you attempt to do it across the board, it will
10 be a rather daunting exercise. But that's something you're
11 going to have to decide early on, at the very least, to get
12 as close to the original information as you can. And avoid
13 having it filtered through two or three databases to get to
14 yours.

15 Thank you, Chair.

16 CO-CHAIRPERSON RAPHAEL: Kelly.

17 DR. MORAN: I've been through this exercise of
18 pesticides of trying to find a data set for various
19 pesticides, some of which have a lot of data, some of which
20 have very few. And one of the things that I found was what
21 Bill was mentioning. How you go to a lot of different
22 databases and they all get the information from the same
23 place.

24 And what I came to was that there were certain
25 places that I went to first because I knew they were the

1 primary sources, or because I knew the data were of higher
2 quality. That they were, for example, peer-reviewed before
3 they were entered into the database.

4 And so I kind of have, I have a tiering that I
5 use. If I'm looking for a particular piece of data on a
6 pesticide I walk through databases in a certain order, or
7 data sources in a certain order.

8 What I would suggest is that as you assemble this
9 and you're going to group data and resources in a particular
10 ways, that you do the same thing. That you put things in
11 the order so that not everything -- for every chemical you
12 won't have data from all the different sources, but that you
13 create an ordering system such that they appear in order of
14 what you think is the relative quality of the data source
15 for the particular kinds of data that are in that venue.

16 And that will help people tremendously, because
17 people do click on the first thing. And you can let people
18 know that they're doing that.

19 And then I'll just briefly say that on the other
20 question, the question mark is, for me, the greatest way.
21 The PAN folks use that in their -- after going through a lot
22 of different options. If you have a gap, if you show a
23 question mark then you're showing some things that people
24 know that it's not a glitch on their screen that nothing is
25 there. And it's not offering an opinion.

1 CO-CHAIRPERSON RAPHAEL: Thanks. I'd like
2 everybody to look at page 8 of Donn's handout, if you can,
3 where he outlines a couple potential groupings of sources
4 that they're thinking about. I don't know what slide number
5 it is.

6 And there you can see he's got, you know, sort of
7 labels of groupings of sources. And I'm wondering if, when
8 people saw those potential groupings, if anything came up
9 for them in terms of things they liked, things they didn't
10 like, how you might actually use -- make this as a useful
11 grouping in communicating the value of the information,
12 perhaps. The solidity, how much is behind it.

13 So, does anybody --

14 DR. SCHWARZMAN: Would you confirm what page we're
15 looking at?

16 CO-CHAIRPERSON RAPHAEL: Oh, it says --

17 (Parties speaking simultaneously.)

18 CO-CHAIRPERSON RAPHAEL: What's on the screen. So
19 if you can't find it, sorry. It's behind me.

20 So did that come up, when people looked at that
21 grouping he was, you know, really his question is sort of
22 directed specifically for us as a way to get started. You
23 don't have to have thoughts. I just don't know. Are you
24 all tired? Anne.

25 DR. WALLIN: I guess the second one is closer to

1 the -- I think you want to think about authorities. I don't
2 think you take regulators necessarily over let's say the
3 National Institutes of Health or something like that, which
4 really isn't a regulatory body. But they certainly are a
5 government authoritative body.

6 And I don't know that I would, out of the box,
7 split the U.S. authorities from those around the world. I
8 think a government authorities tab would be good, and
9 universities and scientific institutions are good. But I
10 just wouldn't necessarily focus on regulators.

11 CO-CHAIRPERSON RAPHAEL: Dale.

12 DR. JOHNSON: Well, I think the answer is the
13 level of curation and quality of database, rather than where
14 it's actually coming from. And so you could find this out
15 in various places.

16 So if you go to carcinogenicity data there's very
17 specific databases that define how they're curated, what the
18 source is. And that becomes very important.

19 And so somebody else was saying in several
20 databases, and they'll be nice databases with a lot of the
21 same information, there could be as much as 10 percent
22 error. And it's strictly the level of human error that's
23 going into putting the information in. It's not deliberate
24 error or anything else, it's just basic human error.

25 So the curation process is really cutting down

1 that 10 percent error down to something that's really good.

2 And that becomes a key thing.

3 So I think the order is the quality of the
4 curation of the database.

5 CO-CHAIRPERSON RAPHAEL: Kelly.

6 DR. MORAN: What I was commenting on was don't do
7 this, do the thing I was saying --

8 CO-CHAIRPERSON RAPHAEL: Wait, don't do this?
9 Wait, --

10 DR. MORAN: I would not recommend grouping sources
11 in this way, but rather grouping them by quality.

12 CO-CHAIRPERSON RAPHAEL: Which to me means you
13 have to develop criteria for how you judge quality; be
14 transparent about that criteria; and then show people how
15 you've ranked their database.

16 DR. MORAN: I don't know you'd have to go that
17 far. I mean everything shows up in an order. I would
18 suggest the order be based on DTSC's assessment of quality.

19 If they want to go through that whole exercise, they could.

20 Or they could just interview a bunch of people and their
21 own scientists and say which one should be the first. At
22 lot of times it's very obvious once you go through it.

23 CO-CHAIRPERSON RAPHAEL: Okay, so we've got Meg,
24 Dale, Ann. Unless somebody wanted to respond to that.

25 DR. JOHNSON: Well, the key is it's, you know, the

1 databases that are really curated well and everything, those
2 are already established and there.

3 It's the ones below that where you have to
4 establish the criteria of how good they actually are.

5 CO-CHAIRPERSON RAPHAEL: Okay, we'll come back to
6 it if you wanted another comment, but Ann.

7 DR. BLAKE: I would just echo that. The
8 establishment of databases was a pretty, you know, IARC,
9 there's no question about it in Prop 65.

10 When it starts getting to end points where the
11 databases are not so obvious, endocrine disruptors,
12 neurotoxicity, you really need to be clear and transparent
13 about the criteria for why you're ranking a particular data
14 source.

15 DR. SCHWARZMAN: I guess mine is a bit of a
16 follow-on to Ann's in that the obvious sources, the
17 government authorities and things like that have only taken,
18 it's immediately the lamppost problem.

19 So there are some sources like IRIS or NPP who
20 have taken a detailed look at some of the oldest, most well
21 established toxicity end points or best studied chemicals.
22 And then I think a harder question is where you go for the
23 additional information that we were trying to find a way to
24 put into a clearinghouse.

25 And aside from that, it seems like it's possible

1 also for DTSC to not decide a priori how people would want
2 to group databases, but to give the option of saying I would
3 like to select all the databases that are issued by a
4 government authority. And they get grouped and delivered to
5 the searcher that way.

6 Or all of the databases that are curated by a
7 university. And they get grouped and delivered to the user
8 that way.

9 So we don't have to come to consensus about what
10 an appropriate grouping is, if we give people the option to
11 group in a way that makes sense to them.

12 CO-CHAIRPERSON RAPHAEL: Tim, did you want to --
13 you were -- I mean I cut you off pretty harshly on that, I
14 know.

15 (Laughter.)

16 (Parties speaking simultaneously.)

17 CO-CHAIRPERSON RAPHAEL: So I'm giving you the
18 option now to finish your thoughts, because I thought they
19 were really interesting, and I was just in a hurry to finish
20 that section.

21 DR. MALLOY: Now it's 50 seconds. Thank you, I
22 appreciate that. We've moved on, so -- but I will, since
23 I've been given the opportunity, I will say I really like
24 Meg's idea. And I think -- I'm assuming, I don't know if
25 you're assuming this, but I think there's a way of doing

1 both.

2 You have a default organization, but you give
3 people the option to customize it, if they like, right? Is
4 that what you were suggesting? And I think that's a great
5 idea.

6 CO-CHAIRPERSON RAPHAEL: Okay, this is so cool.
7 There's no cards up. Oh, Roger.

8 (Laughter.)

9 CO-CHAIRPERSON RAPHAEL: I had this whole plan.
10 Go ahead, Roger.

11 MR. McFADDEN: And I'll be real brief. I was
12 curious if peer-review studies, peer-review journal, there's
13 a merging data all the time here. And a lot of these
14 databases are, I don't want to call them stagnant, though if
15 you look at the data it's pretty old at times.

16 How are you planning to use, I guess, peer-review
17 journals which we in the science community revere? Because
18 it's published, it's studies, and then it's peer reviewed
19 and has an opportunity for others to share the data.

20 How were you going to use that in this work, if at
21 all? This is a question more than a -- I mean I'd like to
22 see it be used. I mean, as a scientist, I'd like to see it
23 be used, but I was just curious if there'd been thought in
24 that area.

25 MR. DIEBERT: We've given a lot of thought to, you

1 know, which databases to use and which not to use. And,
2 generally, if we can get access to it, we'll put it in the
3 database so it'll be part of the information that's
4 available for people to use.

5 CO-CHAIRPERSON RAPHAEL: So what I'd like to do
6 now -- I know your card's up, Melanie -- is I would like as
7 a way of wrapping up, I would like to just offer the staff,
8 each one of the three of you, a minute or so to say what you
9 heard, if you have any closing thoughts to us, any
10 invitations to us. And Melanie's got her card up.

11 DR. MARTY: Yeah, this is just to respond to the
12 question that Roger raised. It's a big issue to me because
13 many of these databases, IRIS, IARC, et cetera, are based on
14 older information. And because the organization hasn't
15 gotten back around to looking at that chemical again, they
16 could be quite wrong.

17 So I think it's a really big problem. I don't
18 have a solution to it other than to link out to PUBMED and
19 they can search the literature themselves. But, you know,
20 that's asking a lot.

21 CO-CHAIRPERSON RAPHAEL: Okay, any -- Su and Donn,
22 do you want to --

23 MS. PATEL: Thank you all for that wonderful
24 discussion and all the wonderful ideas you have given us.
25 What I heard, and if I heard it wrong I want to be corrected

1 now, is that there was some debate about where we should
2 direct our first cut at. And I've heard practitioner, I've
3 heard user.

4 And I think that we are asked to build something
5 for the public and we are all public. So if we prioritize
6 to build for the practitioner first, and then move towards
7 simplifying it for the other users, I think none of you will
8 be offended.

9 The other thing I heard was about prioritizing the
10 sources. And I think that we have thought about that. The
11 reason for the tabs and the groupings is that we were
12 thinking there will be people that are small to medium
13 businesses that will only look at this because there is a
14 reg or there is a rule that they have to comply to. And
15 then they will want to look for what is the government
16 saying.

17 So, I think we could combine it to have the
18 grouping and then prioritize it within the grouping. I
19 think that is what Meg was saying.

20 So I see nodding, so I think I got that. And
21 thank you, once again.

22 MR. DIEBERT: I'd like to just take a few minutes
23 to say thank you for all your information and input. We
24 appreciate everything you've done. Be looking for, again,
25 partnerships -- a lot of functionality people are

1 requesting. There's a lot of cost to that. And we're going
2 through that discussion of financing; we're going through
3 that discussion of how to make it happen.

4 So if there's any bits and pieces that you think
5 you can come to and think you can help us out on, we're
6 open. We're open to make sure that it works for you folks;
7 hopefully it works for the consumers.

8 I know Ann and other folks have been working on
9 the consumer side of it. We've talked with the folks trying
10 to get that aspect, kind of operational. But, again, we're
11 early in the process, trying to make those inroads to make
12 things happen.

13 Thank you very much.

14 CO-CHAIRPERSON RAPHAEL: Thank you. Thank you all
15 three for your excellent work. It's really just so
16 heartening to have such wonderful partners in the public
17 sector. So thank you for braving through furloughs and
18 everything else that you've braved through to power through.

19 So, we have one order of business we want to do
20 before we turn this over to Maziar to close us out for
21 another amazing meeting. And that's something the co-chairs
22 have been talking about. And I'm going to just let Ken walk
23 us through this pretty quick five-minute exercise.

24 CO-CHAIRPERSON GEISER: We're just curious. Of
25 course, as you probably know, the co-chairs meet with the

1 staff prior to these meetings and try to listen to what the
2 staff is trying to get at; offer some advice on how to think
3 about the agenda and the organization of the meeting and
4 things like that.

5 And I think we've found that the staff is very
6 responsive to suggestions that we have about how to make
7 these advisory panel meetings most successful.

8 But we don't actually ask you, and so maybe just a
9 couple of words from you all. How are these meetings
10 working? Is this format working for you? Are you able to
11 get the information across that you want to get to the staff
12 when they make presentations? Do you feel like you're
13 valued and getting good use of your time? Have you any
14 points on that that you're interested in sharing?

15 (Laughter.)

16 DR. WILSON: Well, I was going to say I think
17 this, you know, the last couple days worked a lot better
18 than what happened last time, where I felt that -- I mean I
19 talked a lot about disciplining the responses to the
20 questionnaire yesterday, but I think the last session, you
21 know, we sort of dealt with, you know, staff wanting us to
22 answer specific questions that we didn't feel we wanted to
23 answer. That we wanted larger, you know, we wanted a larger
24 perspective and so forth.

25 And it didn't feel that that occurred this time.

1 I felt we really appreciated the facilitation in a way that
2 the questions and so forth were set up. This one definitely
3 worked for me.

4 DR. CARROLL: Could I add something that Ken and
5 Mike -- one of the reasons for that is I think we sort of
6 felt, in doing this, that in the meeting last fall we had
7 six pounds to wedge into a five-pound bag.

8 And this meeting we knew we had a little bit
9 looser schedule, which I think it kind of changes the way
10 that you try to manage your time, as you do it, this
11 definitely did feel differently. I agree with you.

12 CO-CHAIRPERSON GEISER: But I do take from Mike's
13 comment the point about looking very carefully at what the
14 question, what the level of the question is that's being
15 asked as to how best to make sure we get the right
16 responses.

17 DR. BLAKE: I'm not sure if I have anything to add
18 to that except that I felt that we did have more opportunity
19 this time to shift the conversation, and that was part of my
20 frustration yesterday was that I felt like the questions we
21 were being asked by staff were not at the level as was last
22 fall. I wanted to ask a bigger question about the purpose,
23 which we got to eventually.

24 And perhaps because of the scheduling and the
25 amount of content that we were dealing with last fall versus

1 this time, we didn't have the opportunity, or was harder for
2 us to shift that conversation to where the panel thought it
3 was more appropriate. And in fact, we had to sort of
4 mutiny, as I remember, last time in order to get our larger
5 questions addressed before we got to the follow-up questions
6 that I know staff very much appreciated answers to.

7 I would just like to add my appreciation to the
8 co-chairs. I know they put a lot of work in, along with
9 DTSC Staff, to make these meetings work ahead of time. I
10 intend to take my hat off to them for --

11 (Laughter.)

12 DR. BLAKE: -- being willing to ride herd on a
13 rambunctious bunch like us.

14 CO-CHAIRPERSON GEISER: Other comments? Just
15 quick comments on this?

16 CO-CHAIRPERSON RAPHAEL: Kelly.

17 DR. MORAN: I just wanted to quickly, I think DTSC
18 has figured out how to do the logistics of such a
19 complicated meeting really well. And I really appreciate
20 that. And I appreciate the chair and all the staff work
21 here, and the team of everyone getting that together.

22 The comments about the level of questions, I think
23 a panel like this, you're really looking for bigger picture,
24 higher level questions. And encourage something that
25 started a little bit this time, but as much as possible

1 giving us the detail ahead of time, and not spending a lot
2 of time on presentations. Today's presentation, I think,
3 was more the right length.

4 And it would be helpful to get briefing
5 information ahead of time, an assume that we will read it
6 and be prepared when we come to the meeting. That's an
7 issue and design I've seen in this meeting as compared to
8 other processes where I'm on panels and commissions
9 elsewhere that I think would help us better make effective
10 use of the time available when you have us actually in the
11 room.

12 CO-CHAIRPERSON RAPHAEL: Dale.

13 DR. JOHNSON: Well, I think these meetings
14 actually worked extremely well. When you get this number of
15 people in a room that actually don't yell at each other, and
16 you can actually listen to a lot of different points of
17 view.

18 The thing that I would like to see at some point
19 is where we are accomplishing all the goals that, you know,
20 that are being set. Where are we? Are we 60 percent there,
21 you know. Are we going to make the deadline?

22 And that would be really interesting to see
23 because, you know, we're invested in this also, so we want
24 to make sure that things are getting there.

25 DR. SCHWARZMAN: I think Dale raises the point

1 which is about information going the other way, in a sense,
2 because I think, as panelists, that's one of the things that
3 we want is to know that our input has been reflected in
4 something that is done. And so it's sort of feedback on how
5 through the process we are.

6 But also to see that the input, when we do get a
7 sense around the panel that everybody is tending in a
8 certain direction, to see the Department move to incorporate
9 that into what happens, I think is really critical in
10 keeping the panel engaged in the process. Otherwise it's
11 not worth the effort, you know. And so today feels very
12 successful to me in that way.

13 I think the difference that people feel between
14 this meeting and the one in the fall is partly to do with
15 the amount of information and the size of the job that we
16 had. And I think the size of the job last fall is going to
17 come back, in a sense, when we start responding to the
18 regulations. And so we're going to have to deal with that
19 problem again, because there's going to be a very big job
20 when those come out.

21 And so we need to take what we've learned from the
22 meetings, these three meetings, and ask the questions in the
23 best way possible from what we've learned at these three
24 meetings to address that much more hairy, you know,
25 elephant-sized set of problems that's going to come back to

1 us.

2 CO-CHAIRPERSON GEISER: Roger.

3 MR. McFADDEN: I would like to compliment and join
4 my colleagues once again congratulating the chairs, the
5 three chairs. Excellent job.

6 DTSC Staff, Kathy, great job of prepping. A lot
7 of these are going to be successful. And those, there you
8 are, for us getting the information ahead of time. Thank
9 you.

10 Also, thanks to my colleagues I think what this
11 proves is that even smart people don't always agree. But
12 the one thing that I appreciate about this panel is that we
13 respect each other as colleagues. And I think that is good
14 testimony to who's been appointed to this panel. But also
15 just the peer professionalism and professional way that
16 everyone's conducted themselves.

17 So, I would just kudos and hats off, honor
18 everyone.

19 CO-CHAIRPERSON RAPHAEL: Kelly.

20 DR. MORAN: Oh, I still got something really
21 important. I was busily thinking staff, we didn't
22 specifically mention the staff from OEHHA, some of them are
23 not here today. But the huge amount of work and are doing
24 it, and we really appreciate that.

25 CO-CHAIRPERSON GEISER: Very fine. With that, I

1 think we heard things about questions, getting things out
2 with enough lead time.

3 CO-CHAIRPERSON RAPHAEL: Okay, and with that, I'm
4 going to turn it to our fearless Director to -- oh, no, I'm
5 not. Kathy, our fearless organizer.

6 MS. BARWICK: Actually Mike could have done this.
7 He was just letting me know that the airport shuttle leaves
8 the hotel at he said the top and the bottom of the hour. I
9 said what does that mean. So, noon, 12:30, 1:00, 1:30. Not
10 used to the military language. I just thought I'd let you
11 guys know.

12 DIRECTOR MOVASSAGHI: So Maziar needs to talk
13 really fast because the shuttle's going to be leaving really
14 soon, so --

15 (Laughter.)

16 DIRECTOR MOVASSAGHI: First of all, let me echo a
17 couple of specific comments, and then some of the broader
18 comments about planning.

19 I noticed Art was really quiet in the discussion
20 about the toxics information clearinghouse. We are looking
21 for partnerships. And as Debbie has mentioned, and a number
22 of you have talked about, there are certain things that
23 we're good at as regulators, and certain things we're not
24 good at as regulators. So it's good to be able to build
25 those partnerships. And dollars are going to drive a good

1 amount of that discussion.

2 But to show you the time limits of how fast we're
3 moving and how important your input is, is that we are
4 having a meeting today at 2:30 with CalEPA to talk about the
5 clearinghouse, the regulations and such. So we're going to
6 hop in our cars and go back downtown, and they will be heard
7 today. So your input is very timely.

8 And to Kelly's point about you all reading the
9 materials, I'm going to get myself in trouble, we're not
10 used to briefing people that actually read the materials, --

11 (Laughter.)

12 DIRECTOR MOVASSAGHI: So we really appreciate that
13 input, to be able to tailor for this audience.

14 What I hear about the type of questions that are
15 being asked and what Meg was referring to about a manageable
16 set of questions and topics is also what I heard when we
17 were talking about scheduling upcoming meetings.

18 It might be very big to bring in a whole
19 regulatory package, but maybe we can bring in, for instance,
20 the alternatives assessment part. And have a discussion
21 about that. Say what context it is that we're going to be
22 using it, but, you know, make that a more manageable topic.

23 And to that end, I will be working with the co-
24 chairs. And a lot of you have been picked for this panel
25 because of particular expertise. So I think the way we

1 might approach this is that as we starting honing towards a
2 particular agenda topic, that we might pick on those with
3 expertise in that arena, and help inform and guide us.

4 But we also have to be cognizant for Bagley-Keene
5 purposes, I don't want all of you to have to read through
6 your form 700 and have us go through conflict of interest
7 before we discuss any agenda topic. So we're going to try
8 to find that appropriate middle ground to work on.

9 Kathy is going to be following up with you all
10 about at least marking the tentative dates for the upcoming
11 meetings to see what works for most, so at least we have
12 placeholder on dates.

13 And again, I am going to commit to this body to
14 bring back the regulations, and definitely have you all have
15 a chance to input on it before we start anything formal.
16 What I, again to reiterate yesterday, the timing might not
17 allow for face-to-face discussion, but I did hear you all to
18 say that a face-to-face discussion is much more preferable
19 over a phone call. And we are going to be working towards
20 that aim. And hopefully we're going to be able to achieve
21 it. It's too early in the year for me to give up on it.

22 But, again, I really want to thank everybody that
23 showed up. Your inputs are very timely. I really mean it
24 when we're going to jump in the car and go to downtown and
25 start talking with the decision-makers about what we've

1 heard today.

2 So, thank you.

3 CO-CHAIRPERSON RAPHAEL: All right. Goodbye.

4 Thank you.

5 CO-CHAIRPERSON GEISER: Thank you all.

6 (Applause.)

7 (Whereupon, at 12:00 noon the meeting was
8 adjourned.)

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CERTIFICATE OF REPORTER

I, JOHN COTA, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Department of Toxic Substances Control Green Ribbon Science Panel Meeting; that it was thereafter transcribed into typewriting.

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

IN WITNESS WHEREOF, I have hereunto set my hand this 9th day of February, 2010.

JOHN COTA, Official Reporter

CERTIFICATE OF TRANSCRIBER

I certify that the foregoing is a correct transcript, to the best of my ability, from the electronic sound recording of the proceedings in the above-entitled matter.

Margo D. Hewitt
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February 9, 2010