

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

GREEN RIBBON SCIENCE PANEL
MEETING

HOLIDAY INN EXPRESS CAL EXPO
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SACRAMENTO, CALIFORNIA

WEDNESDAY, MAY 12, 2010

9:30 A.M.

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APPEARANCES

Green Ribbon Science Panel Members

Deborah Raphael, MA, Co-Chairperson

Ken Geiser, PhD, Co-Chairperson

Ann Blake, PhD

Bill Carroll, PhD, Co-Chairperson

Jae Choi, PhD

Bruce R. Cords, PhD

George Daston, PhD

Tod Delaney, PhD

Arthur T. Fong, PhD

Joseph H. Guth, PhD

Lauren Heine, PhD

Dale Johnson, PhD

Richard Liroff, PhD

Timothy F. Malloy, J.D.

Roger McFadden

Kelly Moran, PhD

Oladele A. Ogunseitan, PhD, MPH

Robert Peoples, PhD

Megan R. Schwarzman, MD, MPH

Julie Schoenung, PhD

Anne Wallin, PhD

Michael P. Wilson, PhD, MPH

APPEARANCES CONTINUED

DTSC Staff Present

Maziar Movassaghi, Director

Odette Madriago, Acting Deputy Director

Kathryn Barwick

Richard Driscoll

Judy Kong

Valetti Lang

Sherri Leiman

Cynthia Miller

Michael O'Docharty

Jeffrey Wong, PhD

ALSO PRESENT

Bill Allayaud, Change Coalition

Randy Fischerbach, Dow Chemical

Jim Houston, BGS Group

Dawn Koepke, Green Chemistry Alliance

John Ulrich, Chemical Industry Council of California

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1 PROCEEDINGS

2 MS. BARWICK: Good morning, everybody, and
3 welcome to another meeting of the Green Ribbon Science
4 Panel. This is the science panel assembled by the
5 Department of Toxic Substances Control to help us with our
6 implementation of our Green Chemistry Program.

7 My name is Kathy Barwick, and I'm staff to the
8 Panel. I work for DTSC. I work for Acting Director
9 Maziar Movassaghi on this project. And I just have a few
10 things that I want to talk about before I turn it over to
11 your co-chairs to manage our day with us.

12 First, a little housekeeping. I think you all
13 probably saw the bathrooms as you walked in. They're
14 right down this hallway and to your left. If any Science
15 Panel member or DTSC staff that will be having lunch today
16 hasn't made a lunch order with Brenda, that needs to
17 happen before 10:00. So we tried to get everybody set up
18 before the meeting started. So if you haven't done that
19 yet, please talk to Brenda. She's over there sitting next
20 to Mike.

21 Today, we have a very interesting agenda.
22 Actually, we'll be going all day today. Today's topic is
23 the draft regulations for safer products outline that was
24 distributed and which is posted on the website.

25 We will have some opening remarks by Director

1 Movassaghi, followed by the Green Ribbon Science Panel by
2 our Chief Scientist, Dr. Jeff Wong. And then Odette
3 Madriago of DTSC will give an overview of the outline for
4 the regulations.

5 After the overview and right before our morning
6 break, we will have a public comment period. And I wanted
7 to talk briefly about that. Our Public Participation
8 Specialist is Cynthia Miller. Where is she? She's out
9 there. Okay. So Cynthia will be collecting comment cards
10 from members of the public that wish to make comments to
11 the Green Ribbon Science Panel. So those comment cards
12 need to be submitted prior to about 10:20 if you'd like to
13 make any comments to the Green Ribbon Science Panel.
14 We'll have a two-minute limit on comments. And for those
15 of you watching the webcast, you may submit written
16 comments to the panel -- and we'll read them out here --
17 at our Green Chemistry mailbox. That's
18 green.chemistry@dtsc.ca.gov.

19 Before I turn it over to Dr. Carroll to start our
20 meeting this morning, I want to mention that your mikes
21 are all live. I don't think there is a shut-off switch.
22 Please, panel members, when you make comments or
23 suggestions, please talk directly into the microphone so
24 that our listeners out on the web can hear you.

25 And, Mike, did I forget anything? Great.

1 Oh, I do want to show you one thing. Mike
2 Kirshner reviewed our documents and sent this to let you
3 all know that despite the fact he's on vacation, he is
4 attending to his responsibilities as a Green Ribbon
5 Science Panel member. I just thought it was so cool I
6 wanted to share it with you.

7 CO-CHAIRPERSON GEISER: Kathy, you didn't mention
8 that that's the Mediterranean we're looking at there.

9 MS. BARWICK: Actually, I couldn't figure out
10 where he is. Anyway, I will now turn the meeting over to
11 Dr. Bill Carroll, who will Chair our morning session.

12 CO-CHAIRPERSON CARROLL: Thank you, Kathy.

13 That actually looks a little like Cedar Lake,
14 Indiana to me. I don't think he's on the Mediterranean at
15 all.

16 Kathy has set up most of the day for you, and I'd
17 like to add a few comments to that.

18 First of all, I want to thank you for all of you
19 who sent us comments last week. We asked you to do that
20 to allow us to try to organize the day in the most
21 efficient fashion to address the things that are most of
22 interest to you.

23 Today is going to be a bit of a forced match
24 because we have a limited period and lots of stuff that
25 we'd like to accomplish. What we're going to try to do

1 during the day is after the morning break and until lunch,
2 we will address the prioritization process and the use and
3 meaning of the term "de minimis." In the first half of
4 the afternoon, we'll address alternatives assessment. And
5 in the final session in the afternoon, any other topics of
6 interest. So I would ask you to compartmentalize your
7 thoughts in those three areas, if you would, please.

8 Our main goal here is to provide input --

9 PANEL MEMBER WILSON: I'm having a hard time
10 hearing you, Bill.

11 CO-CHAIRPERSON CARROLL: Is this better?

12 PANEL MEMBER WILSON: It is better, but it may be
13 that the system itself is bad.

14 CO-CHAIRPERSON CARROLL: So I guess it's good
15 that we checked the microphones, and you might take this
16 as an indication of how close you need to be to them in
17 order to be heard when you intervene.

18 The three sessions today after the public comment
19 and the break in the morning, the first will be on the
20 prioritization process and the use of the term de minimis.
21 The second in the first part of the afternoon will be on
22 alternatives assessment. And the third will essentially
23 be on anything else that hasn't been covered in those two
24 areas. And I'd like to limit the third to everything but
25 the first two so we can cover the comments for the first

1 two in there in their appropriate areas.

2 I would remind you if for some reason you don't
3 manage to get it all in today, this is not your last
4 opportunity to comment. We've been assured by Director
5 Movassaghi there will be at least one more opportunity to
6 see language while it is still in a malleable state prior
7 to going final and allow us to make language comments on
8 the reg.

9 In addition, there is the possibility for a short
10 conference call, not to edit language, but to provide new
11 ideas that might not have been covered otherwise before it
12 goes final. So this is not your last bite at the apple.

13 I'll have some ground rules on the way I'd like
14 us to conduct the session after we have the morning break
15 and -- before we start the first session rather. But once
16 again, I want to thank you, first of all, for submitting
17 the comments. They were very helpful. I hope you will
18 not think that because you wrote it down on that sheet of
19 paper you shouldn't say it today. You should. They're
20 entered, but the purpose here is also to have some
21 discussion among us. And there are provocative ideas
22 there that probably ought to be aired out by the panel and
23 I would urge you to take the opportunity to do so.

24 And so, with that, I guess on the schedule,
25 Maziar, the floor is yours.

1 MS. BARWICK: Okay. I need to make a little
2 housekeeping item. There was a lot of people making their
3 lunch order and not everybody paid. We need to pay prior
4 to making that order. So if you didn't give her \$10, that
5 needs to happen right away. Maybe you could raise your
6 hand. She's not sure who paid and who didn't. If you
7 made a lunch order and you didn't give money --

8 CO-CHAIRPERSON CARROLL: This incidentally goes
9 to your own sense of ethics and fairness.

10 (Laughter)

11 DTSC DIRECTOR MOVASSAGHI: I feel like this is an
12 MPR pledge drive. No free riders here.

13 I think in the interest of time, let me get
14 started here, folks, because we have a wonderfully busy
15 agenda. Again, good morning, everyone. I want to thank
16 all the panel members that are here for attending and also
17 for taking the time to review the outline before this
18 meeting and submitting your comments and questions in
19 writing to us. It is extremely beneficial to us to get
20 that kind of feedback.

21 Just two quick comments. One is I wanted to
22 welcome and introduce Dr. Joseph Guth, who's a new member
23 of the panel. Joe is one of those modest people who's
24 also super smart. He brings both legal and technical
25 background, which is the type of skill sets we very much

1 need. So, Joe, welcome.

2 I also wanted to inform the group that John
3 Warner resigned from this panel. Time commitments had
4 really not allowed him to participate in a full manner.

5 I also want to remind the panel that, you know,
6 the regulations are before us. They're an important
7 component of our Green Chemistry Initiative. But the one
8 for safer alternative was one of six planks of the Green
9 Chemistry Initiative. And it's very important for us to
10 have a discussion about some of the other planks as well.
11 We've already heard about the toxics information
12 clearinghouse.

13 Today, we're going to be talking about expanding
14 pollution prevention, which is another part of the Green
15 Chemistry Initiative. And let me tell you why I think
16 it's very urgent to have that discussion. I have to
17 recognize the fact that we are in a transition year for
18 the state of California. Come January, there is
19 100 percent chance you're going to get a new Governor and
20 there's 100 percent chance that you're going to get new
21 folks in the Environmental Protection Agency. So it's
22 important for me to make sure that I can develop a
23 transition document so hopefully I will get a chance to
24 implement it, but make sure there is a transition document
25 that can keep the momentum going and keep the focus on

1 this initiative and not have it be lost in the transition
2 shuffle. So it's important to get the feedback of this
3 body on some of our other planks.

4 I also want to reiterate what Bill had mentioned.
5 This is only the second of three stages in our review of
6 the regulatory proposal. We will be coming back, and
7 we'll be reviewing a draft reg text as our next step.
8 That still allows all of you other opportunities to
9 provide input into the regulatory process as well.
10 There's going to be additional workshops. There's going
11 to be public comment periods and a formal rulemaking
12 process. So this is not the only time. But we are at the
13 point where it's time for us to be able to take concepts
14 and be able to put them in regulatory writing, so it's
15 important to have that dialogue.

16 And again, I really, really appreciate all of you
17 bringing your expertise and knowledge to share with us to
18 help California write a program that has not been
19 implemented anywhere else. And a lot of folks are looking
20 at us, so we very much appreciate your input and your
21 expertise.

22 CO-CHAIRPERSON CARROLL: Thank you, Maziar.

23 Moving on to the schedule, Dr. Jeff Wong for
24 introductions, please.

25 DR. WONG: The microphone is set up for Kathy,

1 not for me.

2 (Laughter)

3 DR. WONG: I'd like to welcome you all here also.

4 It's nice to see all of you. And I'll sort of do this
5 more of a roll call rather than introduction so I won't
6 get you all mixed up. And this is in alphabetical order,
7 not in order of importance. So when I call your name,
8 please raise your hand so the audience can recognize you.

9 Ann Blake from Environmental Public Health
10 Consulting. Is Ann here? There's Ann. All right.

11 Bill Carroll from Occidental Chemical
12 Corporation, co-Chair.

13 Jae Choi, from Avaya.

14 Bruce Cords from Ecolab.

15 George Daston from Proctor and Gamble.

16 Tod Delaney, First Environment.

17 Arthur Fong from IBM.

18 Ken Geiser, U. Mass., Lowell, Co-Chair.

19 Dr. Joseph Guth, he is from Science and the
20 Environmental Health Network.

21 Lauren Heine from Clean Production.

22 Dale Johnson from Emiliem and U.C. Berkeley.

23 Richard Liroff from the Investor Environmental
24 Health Network.

25 Professor Malloy I know is not here yet.

1 Roger McFadden from Corporate Express.

2 Kelly Moran from TDC Environmental.

3 Oladele Ogunseitan from U.C. Irvine.

4 Robert Peoples, good morning. Robert Peoples
5 from ACS, the Green Chemistry Institute.

6 Debbie Raphael, Co-Chair from San Francisco.

7 Julie Schoenung from U.C. Davis.

8 Dr. Megan Schwurzman from U.C. Berkeley.

9 Dr. Anne Wallin from Dow Chemical.

10 Michael Wilson from U.C. Berkeley.

11 One thing I'd like to do, we always save it until
12 the last and we tend to forget. We need to thank Kathy
13 Barwick, Judy Kong, and Michael and Cynthia, who are back
14 over there. They're the ones that make this place run
15 smooth. Again, Brenda, thank you.

16 (Applause)

17 DR. WONG: Brenda from DGS and, of course, the
18 team led by Stoig Erin from DGS. They also provide the
19 video support, and also they're taking care of your lunch.
20 So if you're bad, your lunch will taste weird.

21 And of course, the folks that run Holiday Inn
22 Express. Jaime Engeileiter, she's the one that will
23 hopefully keep the air conditioning in the order that we
24 like. So once again thank you.

25 CO-CHAIRPERSON CARROLL: Very good. Thank you,

1 Jeff.

2 So we'll move on to the schedule, which you have
3 in front of you. And the first session here is
4 presentation on the safer alternatives regulations outline
5 that you've received. To give you an overview is Odette
6 Madriago.

7 Odette, the floor is yours.

8 ACTING DEPUTY DIRECTOR MADRIAGO: Thank you.

9 Can everyone hear me all right? Good.

10 I'm going to start by reiterating some of what
11 Maziar said. This is the second stage in the process. We
12 started with the flow chart, which you all gave us a lot
13 of very helpful comments on. We now have the outline,
14 which does conform to the floor chart. It's just got more
15 details in it. And we are diligently working on the
16 regulations themselves, but there's a lot of aspects that
17 we're still wrestling with, taking consideration on, and
18 we're looking forward to your input today to help inform
19 us on in developing those regulations.

20 The draft regulations, when we do release them,
21 which we hope will be in the near future, will first be
22 workshopped. They will then be refined based upon
23 comments we receive from the workshop and then that
24 interim period, and then we'll initiate a formal APA
25 process.

1 So as I mentioned, we start with the flow chart.
2 We got comments from people and you'll see that while this
3 outline follows the flow chart, there are some details in
4 here that are in response to some of the comments we
5 received from all of you as well as others. And probably
6 the four key areas that I would highlight, one is many of
7 you stressed that we needed to combine the chemical
8 prioritization and product prioritization processes. Now,
9 you will see in the outline they are still laid out
10 sequentially as chemical prioritization followed by
11 product prioritization. But there are elements in both of
12 those that intertwine them. So when we're looking at
13 chemicals, we're considering what products are in those
14 chemicals. And of course as we're looking at products, we
15 are looking at the chemicals in there. So while we still
16 have a two-step process, we tried to integrate it so
17 there's not a firewall between the two.

18 The second area that we heard about from many
19 people is the need to fill data gaps. So you will see --
20 it's actually on the first page of the outline IND,
21 information submittal requirements. We put in there
22 requirements that manufacturers will, upon request from
23 DTSC, be required to provide different kinds of
24 information on chemicals.

25 Now, I know that one of the questions that's

1 still out there is what we've got listed here are things
2 that are already existing data. I know there is a
3 question about, well, so if the existing data has gaps in
4 it, can and will DTSC force manufacturers to actually go
5 out and run tests and do whatever needs to be done to fill
6 the data gaps?

7 During the up-front part of the process prior to
8 and during prioritization, we envision that our other
9 existing regulatory authorities, in particular SB 289,
10 gives us the ability to call in that information. Once we
11 get through the process that you can now see laid out in
12 the flow chart before you, one of the regulatory responses
13 clearly gives us the ability to require manufacturers to
14 submit additional detailed information on chemicals of
15 concern and their alternatives. So that gives us very
16 strong authority to require a generation of new data.

17 The third area that we heard a lot of comments on
18 is: How are you going to ensure compliance? How are you
19 going to enforce this? So we have built in several
20 different places in this outline some mechanisms that we
21 think will enable us to do that.

22 And finally, we got a lot of comments on how are
23 we going to ensure the integrity of the alternatives
24 assessment. So in the flow chart, we talked about having
25 a certified third party; that was one option for

1 manufacturers to choose. We've now actually in the
2 outline beefed up certification requirement even for those
3 alternatives that are done for manufacturers. And I will
4 tell you that this is an area that we're still really
5 wrestling with. So if it's something you all want to
6 comment on and talk about, it's certainly something we
7 would either now or later appreciate feedback from.

8 So with that, I'm going to now at a pretty high
9 level walk us through the outline. I'm going to try to
10 keep myself to the 30 minutes, because this meeting really
11 is about us being able to hear from all of you and you all
12 being able to talk with each other so we can take back
13 from this meeting input that can inform our drafting of
14 the regulations.

15 So starting from the top, with the applicability
16 section, these regs will apply to consumer products as
17 that definition is laid out in the statute. And I'm not
18 going to reiterate them. But as you know, the statute is
19 pretty broad in its scope, but it does have some specific
20 exclusions. And so those same exclusions apply to these
21 regulations.

22 We are also looking at how these regs apply and
23 should they apply to intermediate products. And I know
24 there's been a number of questions about what do we mean
25 by intermediate products and how is that going to phase

1 in. And that again is something that we are continuing to
2 wrestle with and consider as we're drafting these
3 regulations. So please, that's something else that we
4 would appreciate feedback on if you would like to offer
5 it.

6 The certificate of compliance, this is part of
7 the compliance scheme that we see. Because, really, while
8 these requirements are, you know, being placed on
9 manufacturers, most of these manufacturers are going to be
10 located outside of California, outside the United States.
11 So really, our practical point of compliance is at the
12 point of sale in California. So retailers need to know if
13 what's on their shelves -- is this something where the
14 manufacturer -- number one, is it a priority product? And
15 if so, is it something that the manufacturer is in
16 compliance with? And so the certificate of compliance is
17 one mechanism we're looking at so that retailers would
18 have that information. And DTSC, of course, will be going
19 out with our secret shoppers and seeing what's on the
20 shelves, comparing it to the list.

21 There again, if you have other ideas on how we
22 might approach this aspect, let us know, please.

23 The affirmative defense just gives retailers the
24 protection to sell a priority product as long as they have
25 assurance that the manufacturer is in compliance.

1 D, the information submittal requirements, we
2 talked about the first part which I think will give us a
3 good chunk of data as requiring manufacturers to submit to
4 DTSC all of the data they've already submitted to REACH,
5 TSCA, or CEPA. But then there's provisions for additional
6 data for them to provide to us upon our request.

7 And the last item you want to focus on just a
8 little bit, because I know there have been a number of
9 questions on this, is the marketing data. And what we had
10 in mind is getting information on how much chemical or how
11 much of a product with a chemical is out there in commerce
12 and where is it in commerce. So that's what we meant by
13 marketing data.

14 Information submittal requirements, this is just
15 requiring that the data be submitted to us electronically
16 and in English. And this is a practical operational need
17 for us to be able to manage the data that will be coming
18 in.

19 The definition section, I'm not going to spend
20 too much time here. As you can see, there's a lot in the
21 outline -- there's a lot of yet-to-be-defined terms. But
22 they're terms that we felt probably will need a
23 definition. We're carefully monitoring our definitions as
24 we develop them in the regulations to make sure we are
25 only including things that we really need definitions for

1 and we're being cognizant of how the definitions fit into
2 the workings of the regulations themselves. So I'll
3 comment on just a few more, and if there's any of these
4 that you have particular thoughts on, you can express
5 those during the day.

6 Consumer products, there are questions on that.
7 Again, we're just sticking with the definition and the
8 exemptions that are in the statute.

9 De minimis, you're going to be talking about that
10 later today, so I'm not going to talk about that, except
11 to point out that there was an unintended error. The last
12 sentence there, it was meant to just say "de minimis does
13 not apply to nanomaterials." So just note that for your
14 conversation later today on de minimis.

15 Hazard trait. As you all know, OEHHA is in the
16 midst of identifying the hazard traits for the toxic
17 clearinghouse, but which will also be the initial screen
18 for chemicals to get into our process. I believe they had
19 a workshop yesterday and the day before on this.

20 So also when they've adopted their list, hazard
21 trait as used in this regulation for the first screen on
22 the flow chart will be OEHHA's list, but knowing they have
23 assured us that they are aiming to have their list adopted
24 the same time we are planning to have these regulations
25 adopted, but we realize that may not happen. So as a fall

1 back, we have an initial limited set of hazard traits that
2 will enable us to move forward with the very first list of
3 chemicals of concern and products in the absence of the
4 OEHHA list.

5 Intermediate product, already mentioned this is
6 something that we are having a lot of discussion on and
7 would welcome any input.

8 Manufacturer, this one I just want to highlight.
9 This is a definition we're making significant changes to.
10 And this definition, you know, it's important in terms of
11 who is required to fulfill the requirements to site an AA
12 and to do certain other things in the regulation. And so
13 it's going to be different than what you see here. Again,
14 your thoughts are appreciated.

15 The last one I want to touch on is trade secret,
16 and I'll talk about this more when I get to the end of the
17 outline. But we are pretty limited to the definition
18 that's referenced in the statute. So that's what we're
19 going to be consistent with. But we will be proposing
20 some more specifics in the regulations.

21 Now on four page, for those of you who are
22 following along, chemicals of concern prioritization
23 process, applicability section, as I already mentioned,
24 the initial screen will be the hazard trait list. So
25 potentially any chemical that exhibits one of the hazard

1 traits will come into the process. The two initial
2 screens, which I don't expect to have much applicability
3 of, I think the chemicals that would be screened out by
4 items number one and two, would be extremely limited in
5 nature. But they're there. If there is a chemical that
6 is regulated by other governmental entities throughout the
7 life cycle in the same -- that addresses the same concerns
8 being addressed by these regulations, then we would go no
9 further. Likewise, if it was demonstrated there was no
10 exposure pathways whatsoever for the chemicals, that would
11 eliminate it from further work.

12 So going along with the flow chart there, we're
13 first going to identify chemicals under consideration,
14 which is the first screening down which will be followed
15 by coming up with the list of chemicals of concern that
16 will tell us which products we want to focus on. So you
17 see we've laid out here -- lost our screen.

18 Thank you.

19 We've laid out here fairly long lists of factors
20 that we will look at in terms of identifying what should
21 be in the box of chemicals under consideration. We're
22 looking at chemical traits, physical properties, volume,
23 public health factors, and looking at sensitive
24 subpopulations which is something called out in statute,
25 looking for the potential for the public to be exposed.

1 And we're also looking at adverse impacts on the
2 environment and the potential for releases to the
3 environment.

4 And here again, we will be looking at the extent
5 to which chemicals may be regulated by other governmental
6 agencies, because I think in most cases I think it's going
7 to be extremely rare where a chemical is going to be
8 completely regulated by another governmental agency
9 throughout its life cycle. So instead, I think we're
10 going to be looking at this a lot more to say to what
11 extent is it regulated by governmental agencies? During
12 what parts of the life cycle? What public health
13 environmental concerns are addressed by those other
14 governmental regulations? So those are the highlights.
15 And I know I'm going really fast, but I want to give you
16 guys plenty of time.

17 So then we developed a list of chemicals of
18 concern. And we're going to use the same factors that
19 were used for chemicals under consideration, but then we
20 look based upon those factors of which chemicals pose the
21 greatest threat to public health or the environment. And
22 we're also going to take in here -- this is where we're
23 going to be really scrutinizing the data that is behind
24 that assessment, because we want our prioritization
25 process to be based upon peer reviewed scientific data.

1 And we've laid out here some of the sources that we feel
2 fall into that category.

3 And the final factor is availability of
4 resources. And I know there's been some questions on
5 this. And this is recognition of, you know, we can only
6 handle so much at one time. So, you know, a list of
7 chemicals of concern as well as the products what we get
8 to, they're going to have to be something we can work with
9 in terms of, you know, the alternatives assessment process
10 and the regulatory response process.

11 This is an iterative process. This isn't a
12 one-shot deal. So we'll have one chunk of chemicals that
13 will be moving through the process. Envision probably
14 some staff working on the product alternatives
15 assessments. We'll have other staff working on the next
16 generation of the list.

17 Now, this section -- I'm now on page 6 -- talks a
18 little bit about the very first list. And what we're
19 contemplating for the initial list only is that we would
20 be focusing on CMRs and PVTs. These are fairly broad
21 categories. I know folks are wanting more, so, you know,
22 I'm sure you'll be talking about that today, that initial
23 list. And then after that, that limitations pond. So the
24 process for getting input and finalizing the list, we
25 will -- after we've done our research and our analysis and

1 recommendation, we'll be putting out a proposed chemical
2 list that will have both the proposed chemicals under
3 consideration and chemicals of concern. That will be put
4 out for public review and comments. We have our website.
5 We may do public workshops. Then once we get the comments
6 in and we've considered them, we will post the finalist on
7 our website.

8 CO-CHAIRPERSON CARROLL: Odette, I want to stop
9 you there for just two seconds, please. And I want to
10 remind the public both on the web and in the room that
11 since the next segment is the public comment, if you are
12 looking for time for public comment, please submit your
13 cards or send your e-mails in from the web.

14 Thank you, Odette. Go ahead.

15 ACTING DEPUTY DIRECTOR MADRIAGO: Okay. So I'm
16 moving on to product prioritization, page 7. We're going
17 to look at those consumer products that contain a chemical
18 of concern. And using the two basic strains that we use
19 for chemicals and the comments I made there on chemicals
20 apply here. And we're going to start by developing a list
21 of products under consideration, which will then be
22 narrowed down to the priority products that will be
23 subject to the AA requirement.

24 Here again, some of the considerations are
25 similar to the considerations we use for the chemical

1 prioritization, because there's some differences because
2 we're looking at products and not just the chemical
3 itself. So we'll look for the potential for the public or
4 the environment to be exposed to the chemical of concern
5 in the product. So here we're looking at the combination
6 of the product and the chemical and how the chemical is
7 contained in the product.

8 Dispersive volume, that's how widely used is this
9 product; how many uses up and down, a lot of different
10 ways you can cut it. Look at the types and extent of
11 consumer uses. And we've identified some of the aspects
12 we'd be looking at here.

13 And you will see I know there's been questions
14 about looking at occupational worker health and safety.
15 This is one of the places where we will be looking at
16 exposures in the workplace as a factor.

17 Then we'll be looking at how the product itself
18 is used and managed and whether or not those practices can
19 lead or the potential for the practices to lead to
20 releases to the environment of the chemical concerns in
21 the product. And again we'll be looking at to what extent
22 is the product regulated by other governmental agencies.

23 We're also going to look at -- and I think this
24 is in response to a suggestion we received at some point
25 along the way. Are there existing alternative assessments

1 that have been provided for this product chemical
2 combination? So if something has been provided to us and
3 it's based on peer reviewed data and looks like it's
4 something similar to life cycle assessment thinking that
5 we're proposing, that means there's been a lot of work
6 already done. So that might be a factor in saying, well,
7 this thing is ready to be moved along into the process as
8 long as these other balancing factors are there as well.
9 So that's why that's there.

10 Then from the list of products under
11 consideration, we developed the priority products list.
12 And you can see that the factors are a short list. Again,
13 this list is posted as a proposed list. Receive public
14 comment on it before coming up with the finalist and
15 posting it on our website.

16 When we post this list on the website, we will be
17 identifying for each product category the due date by
18 which manufacturers must submit the alternatives
19 assessment work plan.

20 We put this in here rather than -- at one point,
21 we thought about we'll say all work plans for all products
22 on the list are due by X date and we'll just have it in
23 the regs. And it was suggested that maybe to make the
24 work flow better, maybe we want to stagger that. So
25 that's what our thinking is there. And again, this list

1 will be revised, and it will be a continuous process.

2 So that takes us to page 10, the petition
3 process. This is a process -- and I want to make this
4 clear, because I can tell our wording has caused some
5 degree of confusion. This is something that anybody can
6 do at any time. They can petition the Department to say,
7 hey, we think this chemical or we think this chemical
8 product consideration is worthy of prioritization or at
9 least worthy of being considered in the prioritization
10 process. We do, to the extent possible, want
11 substantiating information as possible to enable us to
12 determine if that petition request is valid and to be able to
13 move it through the prioritization process. Obviously,
14 the more information there is, the faster we can move on
15 that.

16 We are putting a time frame in here for -- I
17 think we're looking at 60 days, not sure, for us to
18 respond to petitions. We will be posting these on our
19 website. We'll make a determination. The determination
20 and the basis for the determination would be placed on the
21 website and we, of course, will notice the petitioner.
22 Now, what this does is if we approve the petition, that
23 doesn't short circuit the prioritization process. That
24 chemical will still get put through the screens that I
25 just talked about in the two prior segments before that

1 would actually result in its being a priority product for
2 which an alternative assessment is required.

3 The alternatives assessment, for all products
4 that are listed on the priority product list,
5 manufacturers of those products will be required to
6 perform an alternatives assessment. The first section
7 here talks about the certification requirements for who
8 can perform those for the manufacturer or within the
9 manufacturer itself. As I mentioned earlier, this is an
10 area that we're still working quite hard on trying to
11 flesh out and again comments would be appreciated.

12 The first step in the alternatives assessment
13 process will be to submit a work plan to the department by
14 the due date the department specifies. There is an
15 exemption process for two categories. One is de minimous,
16 which you're going to be talking about later today. And
17 the other is for small business. And we are in the
18 regulations working on a fairly tight definition of small
19 business. What we're contemplating is something that
20 deals with both the number of employees as well as the
21 sales volume of business. That's where our thinking is
22 going at this point in time. So that's the exemption
23 process.

24 One of the comments that we have heard and that
25 we are thinking about is the way the outline lays this

1 out, the manufacturer would have until the work plan due
2 date to submit an exemption request. One of the things
3 we're toying with is maybe those would have to be
4 submitted sooner than the work plan due date. Something
5 we're looking at.

6 The exemption information will be posted on the
7 website. So that takes us into the work plan. When the
8 work plans come in, we're going to be posting information
9 on our website. There will be a listing of work plans
10 received that will include the manufacturer name, product
11 due date for completion of the alternatives assessment.
12 And then you'll note here what we call robust summary for
13 the work plan, and I think we're actually going to have a
14 different name because robust summary is kind of a special
15 term of art that's close to but not quite what we were
16 envisioning here. I think we're going to be calling it
17 DTL executive summary. And I'm going to talk more about
18 that when I get actually to the very end of the outline
19 when we're talking about the availability of information
20 and the transparency of the information that's flowing
21 into us through this process.

22 So we will look at the work plan to see if it
23 complies with the statute and the regulations. If it
24 doesn't, we give the manufacturer a couple of tries at
25 making it conform. If not, then they would be determined

1 to be out of compliance, and then they go forth and they
2 do their alternatives assessment. We will before that
3 after, we look at the work plan, specify the due date for
4 their completing the alternatives assessment and
5 submitting an alternatives assessment report to DTSC.

6 Okay. Section B, which is on page 12, this lists
7 all the information that we are contemplating required to
8 be in the work plan. I'll just go -- it's very detailed,
9 but we'll have information on the manufacturer, on the
10 person or company preparing it, information on the
11 product, identifying the scope of alternatives to be
12 considered. The manufacturer has the option of choosing
13 how big a project they want to make it, but we want to
14 know what they're looking at. Are they looking at a
15 simple reformulation? Are they looking at a major product
16 redesign or possibly even redesigning the entire
17 manufacturing process or maybe product substitution? Then
18 they need to lay out their proposed methodology in detail
19 and then how they're going to go about doing the product
20 and alternatives analysis and assessment. And again,
21 there's a lot of details in here I'm not going to take
22 time on.

23 We talked about our review. I'm on page 14. And
24 there are processes in here where a manufacturer can
25 request an extension to some of these due dates, which

1 they would have to substantiate and DTSC would have to
2 approve. The manufacturers are given a dispute process
3 for if they disagree with a DTSC request for modification
4 to the work plan.

5 Moving to page 15, the alternative assessment
6 reports. This is what the manufacturer submits to DTSC
7 once they completed the alternatives assessment. And the
8 section lays out what needs to be in the report, starting
9 with describing how they actually went about implementing
10 their work plan, a detailed comparative analysis of the
11 existing product and the alternatives they looked at,
12 identification of the alternative they choose to go with,
13 which might be, hey, we decided to stick with our existing
14 product. Whatever their decision, they have to justify
15 that. And then we want -- where the existing product and
16 the alternatives, we want a comparison of the reductions
17 or mitigations to different environmental impacts.

18 And we want a work plan for implementing the
19 alternative, assuming the alternative is something other
20 than sticking with the existing product. We want to see
21 the work plan and the key milestones and dates, which we
22 will be holding them accountable to. And we want a
23 demonstration of the selected alternative compared with
24 the current product is not going to have any significant
25 adverse impacts on human health or the environment.

1 And we are giving manufacturers the option here
2 to suggest to us what they think would be an appropriate
3 regulatory response and rational. That doesn't mean
4 they're making the decision. It's just giving them the
5 opportunity to provide input if they wish.

6 We review the report again for compliance with
7 the statute, the regulations, and the work plan. And
8 again, there is a process where we can go through notice
9 of deficiency process. Right now, we're looking at giving
10 them three bites at the apple before we determine them to
11 be non-compliant. And they do have a dispute process.

12 Moving to regulatory responses, page 16, the
13 first section is the requirement that I talked about
14 earlier for manufacturers to provide a certificate of
15 compliance to their retailers. And then paragraph two
16 there says that if we don't find the manufacturer at any
17 point that they're not in compliance, not submitting their
18 work plan or their report on time or their work plan or
19 report is not compliant -- and there could be other
20 things, like failure to submit information. If we notify
21 the manufacturer they're not compliant, they have to tell
22 their retailers and their supply chain of that.

23 And then the more specific regulatory responses,
24 which is these general categories are taken pretty much
25 straight out of the statute. So when we get in from the

1 manufacturer their report with their identified selected
2 alternative, we're then going to evaluate that to
3 determine what, if any, regulatory response is necessary
4 and appropriate to address the public health and
5 environmental risks that may still be posed.

6 Now, as required by the statute, we are limited
7 in that our regulatory responses cannot conflict with or
8 duplicate requirements of other agencies. And this will
9 be obviously something that will be a case by case
10 determination. So the first regulatory response is
11 requiring additional information on the chemical of
12 concern and the alternatives. This is the one I mentioned
13 earlier that gives us strong authority at this point in
14 the process to call in a lot of additional information.

15 The second one is requiring product information
16 disclosure to consumers, if that's something we determined
17 would be helpful. And this could be in the form of a
18 label, which isn't always practical. It could be a
19 product enclosure, posting notice that -- depending on the
20 products there are and how it's distributed, there are
21 different options that might work.

22 The third response could be placing a restriction
23 on the use of the COC and the product. It might be you
24 can only use it for products aimed at this particular
25 consumer group or this particular purpose, for example.

1 Fourth one is placing prohibitions on the use of
2 the COC and the consumer product, which would be similar
3 but more stringent.

4 Fifth is imposing safety measures to control
5 access to or limit exposure to the COC and the consumer
6 product.

7 Six is requiring end-of-life management. In
8 other words, take that program and provide financial
9 assurances to make sure that is a sustainable program.

10 Seventh is requiring further research and
11 development. This is something we were envisioning is
12 something we might particularly focus on if the
13 manufacturer has done a very limited alternatives
14 assessment and we think maybe a lot more work might be
15 helpful and appropriate.

16 Eight, we state as time goes we can require new
17 alternatives assessment.

18 Nine, no further action required. This is where
19 they come up with a really great, fantastic alternative
20 and they're implementing it and we don't see any public
21 health or environmental risks.

22 Regulatory response report. After we've done our
23 assessment, we're going to post on our website the
24 regulatory response that we have selected and why. And,
25 again, there will be a dispute process here.

1 The next section on page 19, this is our initial
2 attempt at explaining our thoughts on the certification
3 process. We're certifying people who will be doing the
4 alternatives assessment. We are doing a lot more thought
5 and work on this. And again input would be particularly
6 helpful in this area.

7 And on page 20 is the auditing process. This is
8 again just a very initial rough scope just to call out to
9 folks that we will be auditing the alternatives assessment
10 report's implementation of the selected alternatives,
11 implementation of regulatory responses.

12 And page 21, the last page, the compliance
13 section, we've listed -- this is our initial list just to
14 let folks know. These are the kinds of things that we
15 will view as being violations of the regulations and the
16 statute that we will take action on. One of the comments
17 we've received is there's probably some other things like
18 failure to submit information that you need to be thinking
19 about. So we're looking at this. It may be that rather
20 than having a specific list, we have a more general term
21 on that.

22 And we list here what the available remedies are
23 for violations. We have our traditional penalties in our
24 statute that we have traditionally been using for our
25 hazardous waste violations that are up to \$25,000 per day,

1 per violation. Practically speaking, you know, if the
2 manufacturer is out of state, there may be some -- we have
3 tried this in some cases, but I have to be honest with
4 you, it's not going to be the most practical enforcement
5 tool. But again this gets back to what I mentioned
6 earlier, the most practical enforcement tool is going to
7 be at the point of sale.

8 Lastly, availability of information, or
9 transparency might be another word. And this gets into
10 the whole trade secret issue. So just a couple of points
11 that I want to make here. As I mentioned earlier, the
12 statute does tell us -- doesn't have all the details, but
13 it tells us the other sections of statute we have to
14 conform to in terms of what is a trade secret. One of our
15 attorneys has been working on this and talking to various
16 people, and we are looking at trying to provide more
17 specifics in the regulations. So when you see the
18 regulations, I think you will probably see a lot more
19 specifics in this area in terms of how we think this would
20 work.

21 In terms of what is and isn't going to be a trade
22 secret, a lot of that -- I mean, it's going to have to
23 conform to the definition that we are bound to in the
24 statute. A lot of that in terms of what that actually
25 means will be case by case.

1 Now, I want to talk a little bit more about the
2 availability or limits on the transparency of all the data
3 and information that will be coming into the department
4 from manufacturers. That includes the information that
5 they will be submitting to us up front in the process.
6 When they call in information on chemicals or products or
7 marketing data, they can make a claim of transparency.
8 And if it's valid under the trade secret section of the
9 statute, that will be protected. You are bound by that.
10 The alternative assessment work plan, the alternative
11 assessment reports, same thing, they will under the law be
12 able to make claims of confidentiality.

13 So we will be getting an unmarked version of the
14 report and we'll be getting a sanitized -- there are a lot
15 of terms for it -- version of the report that's their
16 version of what they're striking out as being
17 confidential. That, of course, is subject to the
18 department review and concurrence.

19 But we are also asking for a robust summary, what
20 they're actually going to call the detail executive
21 summary. We want to be able to post something on our
22 website that's fairly detailed that doesn't have all these
23 lines crossed out. And so this will be something that
24 we're hoping is very detailed, but we're going to say we
25 don't want anything in there that you are claiming and the

1 department agrees with is trade secret.

2 Now, anybody can request the full redacted copy
3 of the work plan, the reports. The information is
4 submitted to us. That will be in addition to these
5 summaries that we'll be posting. And again, I'm hoping
6 when we get the regulation out there, it will give you a
7 better idea of the process we plan to use to evaluate and
8 make determinations on these claims of trade secret and
9 confidentiality that will be submitted to us.

10 So I think that concludes what I was going to
11 say.

12 Either Jeff or Maziar, do either of you want to
13 add anything?

14 CO-CHAIRPERSON CARROLL: Thank you, Odette.

15 Maziar, you want to comment?

16 DTSC DIRECTOR MOVASSAGHI: I just briefly -- I
17 hope this body recognizes the wonderful work that Odette
18 and her team have done to -- how should I say this
19 gently -- correct from where we were months ago. They
20 have done amazing work in a very limited period of time,
21 not only internally, but meeting with all interested
22 stakeholders. These are tougher than graduate Ph.D.
23 seminars, because it's multiple multi-hour sessions where
24 we discuss issues in detail. So I want to thank Odette
25 and the team for the time they put in.

1 (Applause)

2 ACTING DEPUTY DIRECTOR MADRIAGO: And I should
3 mention, unless they've come in, the team is not here
4 today. But they're probably watching us all on web cast.
5 And they're not here because they want to keep working on
6 their regulation. And they know that Jeff and I take very
7 good notes.

8 CO-CHAIRPERSON CARROLL: And of course they are
9 multi-tasking by watching us, which I try not to encourage
10 my child to do. You know, I'm not sure you can
11 multi-task.

12 Thank you, Odette.

13 It's now time to move to the public comment
14 section. Cynthia.

15 MS. MILLER: Thank you.

16 We have 30 minutes to accept public comments.
17 Basically, for those of you who are present today, if you
18 would, if you have comments, please provide them to Judy.
19 She's in the lavender sweater. And she'll hand them to
20 me.

21 And basically we'll go through them in the order
22 which I receive them. And what you'll do is come up.
23 There are several comments that I have that -- one is one
24 that was submitted yesterday. The person isn't here
25 today. So I'll read that one. And then I also have

1 another one that somebody has requested that I read for
2 them.

3 So the first comment is the one that I'll read
4 off that was received via e-mail from Brian Kirshner, a
5 chemical engineer, engineering management with 30 years of
6 industry experience. The comment is: The ability to
7 influence chemical selection for new product's processes
8 is best addressed early in the product commercialization
9 process. By the time the new product's processes approach
10 full scale manufacturing, fundamental changes such as
11 swapping any chemicals, i.e., more toxic to less toxic,
12 become very expensive. The best time to pursue more
13 environmentally friendly chemistry is during early stage
14 feasibility evaluations or even during proof of concept
15 efforts. These efforts are usually led by research
16 personnel who are not necessarily experts on regulatory
17 considerations.

18 We need to create a framework that makes it easy
19 for research chemists and engineers to use your guidelines
20 and databases to make sound cradle to cradle decisions.
21 It might be beneficial to dangle a carrot before industry
22 to encourage compliance with these policies.

23 This may take the form of: One, faster permit
24 regulatory reviews for conforming processes and/or; two,
25 some sort of green status acknowledgement, i.e., product X

1 meets the platinum level requirements for green chemistry
2 considerations. This status should be referred to in
3 product marketing/advertising to allow a company to
4 capitalize on the effort required to pursue and achieve
5 this green status.

6 Finally, we are, of course, in tough financial
7 times. So offering companies a green chemistry path that
8 helps boost profit margins would certainly be well
9 received.

10 So the next person is Bill with Change Coalition.
11 Bill, would you mind saying your last name and spelling
12 it?

13 CO-CHAIRPERSON CARROLL: And incidentally, the
14 time keeper is Kathy Barwick, and she will be right here
15 to signal you for time.

16 MS. MILLER: Right. And everyone, please hold
17 the floor for two minutes or under, as we do have a few
18 comments.

19 Mr. ALLAYAUD: Bill Allayaud representing the
20 Change Coalition. I also work for the Environmental
21 Working Group as the Director of Governmental Affairs in
22 California.

23 Thank you very much. It's A-l-l-a-y-a-u-d.

24 In my hand is the Green Chemistry Report prepared
25 by U.C. And you're all familiar with it, of course. And

1 it held great challenges and great promise.

2 So our concern is at the end when this program is
3 adopted that we're meeting a lot of challenges. And I
4 know a lot was laid out. But at this point, we're
5 concerned that the draft regulations or outline of a draft
6 isn't going to get us there to have a robust program or
7 that meets the requirements of 1879, the statute.

8 This is a monumental project. I was thinking
9 back over the years to things that have been created. AB
10 32 and climate change is more overwhelming than this. But
11 this is probably greater than creating the recycling
12 program in the late 80s and other things. So we
13 acknowledge what the department's up against. So but
14 having said that, there's still a lot of things that we
15 see can be improved as we move forward.

16 First of all, we think doing a chemicals of
17 consideration, a chemicals concern list may be somewhat
18 redundant and it's not required by statute. We think we
19 know why the department is doing this, to try to winnow
20 things down. But we think reliance upon existing lists
21 could help with this.

22 My next point is that we don't see a fast track
23 anywhere in this outline to help with that very winnowing
24 process. We don't see where we're saying these are high
25 hazard chemicals, we know it, fast tracking right to the

1 front.

2 We think there is a serious limitation in the
3 draft outline by relying upon Proposition 65 as the sole
4 determinant of carcinogens and reproductive toxicants. We
5 think the Prop. 65 process -- first, the list is very
6 static. Hardly anything is ever added anymore. And it's
7 also become fairly politicized. Some of you know people
8 in the Legislature looking at this. So we're not sure --
9 well, we are sure that just reliance on Prop. 65 for those
10 important chemicals is way too limiting.

11 We're concerned that workers and fence line
12 communities are not adequately represented in these
13 draft --

14 CO-CHAIRPERSON CARROLL: Bill, will you be
15 wrapping up quickly? You're now at two minutes and 30
16 seconds.

17 MR. ALLAYAUD: Sure. I'll go fast.

18 Sensitive subpopulations does not include workers
19 and fence line communities. Otherwise, we think they do a
20 good job addressing these sensitive sub-population
21 pursuant to AB 1879.

22 Couple more points. Third, we think -- and we've
23 made this point all along that it's essential there be
24 third-party assessments of these chemicals, not in-house
25 people certified or not. If the industry is going to pay

1 for something in-house, why not have them transfer that
2 payment or pay to the department who creates third-party
3 certifiers. We think that's absolutely critical. If
4 you're going to spend the money, we feel, I think the
5 public would feel much more comfortable if that person is
6 not sitting talking to the CEO or the executive at a Board
7 meeting the next day.

8 CO-CHAIRPERSON CARROLL: Bill, your time is up.
9 Thank you very much.

10 Would also remind commenters that these comments
11 are more the Green Ribbon Science Panel and not for DTSC.
12 So your comments should be directed to us, as we advise
13 DTSC.

14 Cynthia.

15 MS. MILLER: Thank you.

16 The next commenter is Jim Houston with BGS Group.

17 MR. HOUSTON: I just wanted to raise a point
18 concerning the alternatives assessments. As companies who
19 have products that trigger an alternatives assessment,
20 there is a concern that the information submitted to the
21 DTSC and the process in general could potentially expose
22 those companies to civil liability for defective design
23 just under basic common law product defects liability.
24 Essentially, if I design a product one way and somebody
25 can come into court and say, hey, if you had designed this

1 product in the alternative and it's feasible and it
2 resulted in harm, then there is a strict liability that
3 attaches to the chemical manufacturer. So you want to
4 encourage companies to participate in the alternatives
5 assessment, but I haven't heard a discussion about this
6 potential and protecting participants from that liability.

7 CO-CHAIRPERSON CARROLL: Thank you very much for
8 your comment.

9 MS. MILLER: The next commenter is Randy
10 Fischerbach with Dow Chemical.

11 MR. FISCHERBACH: Thank you. Well, I was going
12 to start out by saying Director Movassaghi and
13 distinguished panelists, but I'll just say distinguished
14 panelists since we're only addressing the panel.

15 I have several concerns, but I'm only going to
16 state a couple of them. I'm torn about the small business
17 exemption and I would encourage you to explore that a
18 little bit. I'm torn, because I understand that the
19 resources of small businesses are very limited and I don't
20 know how in the world they would do an alternatives
21 assessments as robust as what is contemplated here.

22 But I'm also concerned representing a large
23 business, that the playing field be leveled. Some of
24 those concerns are: It would appear that if a small
25 business now has a known priority product by going through

1 the early part of the regulation, they don't have to
2 remedy it. And so they can put that on the market. But
3 they're exempt from the alternatives assessment because
4 they're small. And then what happens when a large company
5 acquires a small company, which tends to happen in the
6 course of things, are they immediately unable to market
7 the thing that they bought the company for? And how does
8 the certification work for a small exempt company? Do
9 they certify they're exempt from the regulation in as far
10 as they are small? Is that what the certification is
11 going to say? We're too small; we're not going to certify
12 that we don't have a chemical concern in our product.

13 CO-CHAIRPERSON CARROLL: Thirty seconds, please.

14 MR. FISCHBACH: Okay. Then I'll go to my only
15 other one.

16 Last time DTSC had a workshop, they said that
17 they were expecting people to only compare like for like.
18 In fact, I got up and asked a question about plastic
19 bottles. And answer was we would expect plastic versus
20 plastic kind of comparisons. This now contemplates
21 plastic versus glass versus stainless steel.

22 So I'm wondering what the logical extension of
23 that is; no pest strips versus fly swatters and things
24 like that. And I don't mean that to be cute, although I
25 think it's a cute example. You get to a point of what

1 really do you have to compare when it comes to
2 alternatives analysis? I think that's really critical.

3 I'll leave it there. Thanks.

4 CO-CHAIRPERSON CARROLL: Thank you very much.

5 MS. MILLER: Okay. Next is Dawn Koepke with
6 Green Chemistry Alliance.

7 MS. KOEPKE: Thank you. Dawn Koepke. And that's
8 K-o-e-p-k-e. And I'm representing the Green Chemistry
9 Alliance, an informal coalition of business interests made
10 up of 150 trade associations and companies all working on
11 helping to foster the development of a regulation that's
12 workable and scientifically based.

13 Many points to make, but obviously with time
14 being short, I'll get right to the many concerns that we
15 have regarding the details. We think, big picture, we're
16 moving in the right direction, but the details and the
17 issues down in the weeds are what's critical here.

18 We have grave concerns with regard to the
19 manufacturers certification piece regarding the fact that
20 there is no current standard regarding what would be
21 involved here and that the alternatives assessment process
22 is terribly complex and a variety of specialities would be
23 required depending on what you're looking at in that
24 alternatives assessment. So trying to standardize that
25 for a certification is going to be incredibly complex, and

1 certainly we're open to hearing your thoughts on that.

2 And we have grave concerns with that.

3 We're also concerned about the applicability
4 section for products and chemicals relative to exposure
5 and the fact that it lacks accounting for reasonable and
6 foreseeable exposure considerations, consistent with other
7 systems out there under Prop. 65, CPSC, et cetera.

8 Also concerned about regulated by others, the
9 duplication factor, what exactly that means. We think
10 there is a great deal of a lack of clarity there, and that
11 is going to be critical to understanding what products and
12 chemicals would be required to go through the process --

13 CO-CHAIRPERSON CARROLL: Thirty seconds, please,
14 Dawn.

15 MS. KOEPKE: -- concerns with certificates of
16 compliance and have been working with DTSC on some
17 alternative thoughts on that.

18 We think the regulatory response actions also
19 lack clarity for what specific outcomes warrant what
20 specific actions.

21 Concerned about the definition of manufacturer,
22 which we've also been working with DTSC on.

23 We also remain concerned about how CBI and trade
24 secret provisions will be further refined within the
25 regulations and maintained as the process moves forward.

1 So thank you for your time.

2 CO-CHAIRPERSON CARROLL: Thank you very much.

3 Once again, I remind you that these are comments
4 to be directed to the Green Ribbon Science Panel to help
5 us in our deliberations.

6 MS. MILLER: Okay. The last commenter I have is
7 John Ulrich. John with Chemical Industry Council of
8 California.

9 MR. ULRICH: Thank you.

10 Good morning. My name is John Ulrich,
11 U-l-r-i-c-h. I'm the executive director of the California
12 Chemical Industry Council. And with my colleague, Dawn
13 Koepke, I'm the co-chair of the Green Chemistry Alliance.

14 It's been my pleasure to speak with you before,
15 and I want to welcome you again to Sacramento and thank
16 you for your participation and your comments.

17 Oftentimes, we hear that this particular proposal
18 doesn't go far enough, doesn't go fast enough, doesn't
19 have enough regulatory clout to it. I would like to
20 suggest that that is a program that I believe can work.
21 It's one that we supported and said that had to be
22 properly scaled. I believe this is properly scaled. It's
23 a start. We never said it's a finish.

24 I think it's extremely important in this
25 Committee itself one of you earlier talked about the

1 problems with straw two proposal which was so overwhelming
2 that there was question whether or not it would be
3 effective. This is going to change over time. We know
4 that. New chemicals are going to be added. There's going
5 to be changes in the regulation. DTSC has made that very
6 clear. So I think it's a good start.

7 I'd also like to comment we believe the de
8 minimis proposal 0.1 percent is appropriate. The petition
9 process, the green box and -- pardon me -- the petition
10 process was recommended by the Green Chemistry Alliance
11 and we do support that.

12 Also would like to echo some of the other
13 comments that were made very briefly. Critical business
14 information is fundamental to the business community. We
15 have to be able to protect critical business information
16 if we are to move forward and innovate.

17 CO-CHAIRPERSON CARROLL: Thirty seconds, please,
18 John.

19 MR. ULRICH: Thank you.

20 The bill is quite clear in this particular
21 situation, and I believe we should stay with that. Again,
22 the one who was a participant in the lobbying of this bill
23 originally in the Capitol, it was not intended as a back
24 door to regulatory programs that were not in this
25 particular agency. So again, duplication is extremely

1 important. Certificates of compliance, certifications of
2 business alternatives analysis are issues that we will
3 continue to follow.

4 Thank you very much. Appreciate and hope you
5 have a good meeting here. Thank you.

6 CO-CHAIRPERSON CARROLL: Thank you very much.

7 MS. MILLER: Well, it looks like we're ahead of
8 schedule. If you don't mind, I'm going to offer up the
9 floor again to those of you -- this mike is going out. Is
10 there anyone left who hasn't spoken that wants to give a
11 comment? Okay. So the folks that have spoken, if you'd
12 like to come up again and please keep your comment brief
13 again, please.

14 MR. ALLAYAUD: Bill Allayaud again for the Change
15 Coalition.

16 Two more points. One was on trade secrets.
17 There's a lot of discussion in the Capitol right now about
18 this, because the SB 928 by Simitian about disclosure of
19 ingredients in cleaning products, I think it should shed
20 some light on what's happening with this process, too.

21 Our feeling about it is that through reverse
22 engineering, the companies basically know what's in
23 everyone else's product. So why are we hiding this from
24 the public? We're not interested in how you make the
25 product, what makes the silky shampoo or secret sauce.

1 The process, I understand, spent a lot of money
2 developing. But what we put on our head, our bodies, is
3 what we are interested in. And why this is being held
4 hidden from the public when your competitors know what it
5 is, that's our feeling about trade secret. I know that's
6 in the context of what 1879 says you can and can't do.

7 Our second comment is on funding. We think that
8 this program could be put in mothballs without adequate
9 funding and that adding a small fee to the chemicals
10 producers, the manufacturer of the products is really
11 going to be the only way to make this happen. If a
12 company has a line of ten shampoos and it ends up three or
13 five cents more per bottle of shampoo to fund this, we
14 don't think the consumer will complain or even notice.
15 But they will notice if they're getting better product
16 information and safer alternatives, which was the whole
17 reason we have the program in the first place.

18 Thank you.

19 CO-CHAIRPERSON CARROLL: Thank you very much.

20 MS. MILLER: Are there any further comments?

21 All right. Well, that wraps up our public
22 comment period.

23 CO-CHAIRPERSON CARROLL: Thank you very much.

24 As I see it, we are now at 10:46, which has us a
25 bit ahead of schedule. What I'd like to do is to ask us

1 to come back from break at 11:05 instead of 11:10, and
2 we'll wrap that five minutes into the next session.

3 PANEL MEMBER WALLIN: Bill, since we have a
4 couple of minutes, could I ask one clarifying question
5 that I can cogitate on?

6 CO-CHAIRPERSON CARROLL: To whom?

7 PANEL MEMBER WALLIN: To Odette.

8 CO-CHAIRPERSON CARROLL: No. I'd like to not
9 have colloquy here. We'll talk about the ground rules
10 after this.

11 So you're on break until 11:05.

12 (Thereupon a recess was taken from 10:46 a.m.
13 to 11:04 a.m.)

14 CO-CHAIRPERSON CARROLL: Thank you very much.
15 I'd like to go ahead and start the first discussion
16 session. And I'd like to set up some ground rules.

17 The Chairs discussed this with DTSC and we'd like
18 to ask you to approach this in this way. Our hope is to
19 get the most information from the panel for DTSC and also
20 to encourage the most discussion among panel members by
21 doing it in this way.

22 In each session, staff will make some opening
23 remarks to set up the discussion. And after that, the
24 floor is ours and ours alone.

25 I'd like to keep our discussions in the mode of

1 expressing opinions and discussing options and out of the
2 mode of asking DTSC questions. And the way this can be
3 done is rather than to say, "What did you mean by" or "Did
4 you mean," you can say, "This section is unclear. I read
5 this to say the following," and then comment. "If, on the
6 other hand, you meant the alternative, then my comment is
7 the following."

8 Now, what we hope will happen then is at the end
9 of the session where there will be an opportunity for
10 staff to comment that if there are things that can be
11 easily clarified, they might do so. But at the same time,
12 if at this point something isn't clear, it's important
13 they understand that it isn't clear and that you are
14 having a hard time reading and understanding the outline
15 and that should be the substance of your comment and/or
16 adjointer to it.

17 So in the end what I'm hoping is that we can have
18 lots of comments from the Green Ribbon Science Panel
19 oriented in that direction as informative to DTSC.

20 Also, once again, I will thank you for the
21 written questions and comments that you sent and encourage
22 you simply because you sent them to us, we use that more
23 for an opportunity to organize this discussion and not to
24 read them into the record. Please feel free to add those
25 comments that you have as time allows, because they may

1 trigger other discussion from members of the panel.

2 As far as getting the floor is concerned, I would
3 ask that you turn your card sideways, and I will keep a
4 list and acknowledge you in the order that I see you.

5 And I think that pretty well brings us to the
6 start of the discussion on prioritization, which is to say
7 both chemical and product, and also a discussion of the
8 concept of de minimis. And at this point, I would ask
9 Maziar if you would, please, go ahead and set the
10 discussion up.

11 DTSC DIRECTOR MOVASSAGHI: Thank you.

12 I think the most important thing I have to lay
13 out is: What is the goal of our prioritization process?
14 The goal of our prioritization process is to be able to
15 create a framework for us to be able to account for new
16 science information, new data information, new products
17 coming into the marketplace, some of which we can't even
18 envision right now.

19 And the other important goal of the
20 prioritization process is to be a forward-looking process
21 rather than a rear-looking process in the sense that we
22 don't want to drive the car looking in the rear-view
23 mirror. We want to be able to look in front of us.

24 And the third important goal for us was to create
25 a process that we can run again and again over time with

1 new data being available, new science being available, and
2 being able to account for it.

3 That has led us to develop the prioritization
4 process that the term of art that was used was it includes
5 a lot of white space. It does not include a scoring
6 factor. It does not include a weighting factor. I'm
7 going to use those as an example in the sense that when we
8 have studied existing prioritization processes or we
9 looked at different attempts that have been made to look
10 at prioritization processes, if you assign weighting
11 coefficient, factors, what you tend to do is capture a
12 snapshot in time of what the science tells you right now.
13 Five years from now, two years from now, ten years from
14 now when this process is going to be run again, our
15 understanding of what is important might have changed.

16 In addition, the whole point of giving us this
17 new regulatory tool was to build on traditional docent
18 duration type looks at toxicity and being able to bring in
19 new tools. Well, when you looked at the vast array of
20 chemicals and consumer products we want to look at to even
21 prioritize, you've got to have a little bit of this white
22 space to be able to deal with all these different factors.

23 Now, I fully agree the next question is: Well,
24 government's role is accountability and transparency and
25 responsibility. How would you demonstrate that? Our

1 response is: We will have a very thorough robust public
2 process. We put out a draft document that details our
3 data, our rationale, and what chemicals and products go
4 into each category. There's going to be probably
5 workshops. There's going to be a public comment period so
6 folks can bring studies to our attention that, for
7 instance, we didn't know of, or if stakeholders believe
8 that we have placed too much weight or too little weight
9 on a factor, they can bring it to our attention. But
10 really, that process allows for transparency and
11 accountability while giving us the flexibility to be able
12 to move forward.

13 And lastly, the reason de minimis is important is
14 that we recognize that in our outline we have established
15 a de minimis level to harmonize with existing regulatory
16 programs, because we do want to have data sharing with
17 existing regulatory programs. But again, we wanted to
18 leave some flexibility, recognizing there's certain
19 products or may be certain chemicals that the .1 percent
20 in our outline is really a point of departure and allows
21 us the flexibility to be able to account for this. Yet,
22 recognizing if our goal in the prioritization process is
23 to capture those chemicals and products that are most
24 prevalent in our economy that by using .1 percent as a
25 point of departure, we wouldn't be shirking our

1 responsibilities.

2 However, it was brought to our attention, and I
3 think it's a very solid policy question by one of our
4 stakeholders, what happens when if we define de minimis on
5 a product by product, brand by brand level? What happens
6 if every manufacturer of that product has that same
7 chemical concern at a de minimis level so when you hit the
8 total button across a societal impact, you have it.

9 Our answer is we believe the flexibility in the
10 de minimis, the .1 percent departure point allows us to
11 account for those differences, but again it has been
12 raised as a point of issue from our different stakeholder
13 groups so we would appreciate a discussion from this panel
14 about is .1 percent appropriate? Is it appropriate as a
15 point of departure? Can we have a system that doesn't
16 have de minimis? These are some of the points. We'd
17 appreciate that.

18 So thank you.

19 CO-CHAIRPERSON CARROLL: Thank you.

20 And the floor is open for comments. I saw Bruce
21 first and then Rich. And then Michael and then Jae.

22 PANEL MEMBER CORDS: I commend the department on
23 what they've done in terms of simplifying this. I've just
24 got one -- when I look at page 4, top of the page under
25 applicability, I read this to say that it applies to all

1 chemicals.

2 And my question is I see this enormous
3 spreadsheet -- I guess an example is you go down the aisle
4 of the detergents and cleaner section of the grocery
5 store, does that mean that we have to develop a list of
6 every single chemical in every one of those products and
7 how do we get that information? I mean, just score
8 chemicals on hazards or not to score them, to rank them or
9 determine whether they have one of the hazard traits
10 mentioned, don't we have to look at all those chemicals?
11 What is the total universe and how do you define the
12 universe of chemicals that are going to be looked at?

13 CO-CHAIRPERSON CARROLL: Okay. Good. Thank you.

14 Let's see. I had Rich next.

15 PANEL MEMBER LIROFF: I was struck by Maziar's
16 comment just now, the concern about the quality of
17 weighting factors. I don't see how you do that without
18 having weighting factors. The trick is to be fully
19 transparent about how you're weighting things: One,
20 because there are so many chemicals out there; and two, I
21 think as one of the social scientists around the table,
22 let's understand that this isn't purely a scientific
23 process. It is laden with judgments. I can't tell you
24 how many panels I've sat around where we talk about human
25 health effects of chemicals and some ecologist says, "By

1 the way, there are environmental effects. Don't forget
2 the environmental effects." So I think by doing the
3 prioritization you've got to, in fact, have these
4 weighting factors and be transparent about them.

5 I think this is a great risk here. But for
6 example, we know that X number of chemicals that are found
7 in amniotic fluid and cord blood, not all of them are well
8 characterized. Well, simply because they're present, if
9 we have toxicity data about them, my personal feeling is
10 that they would be pretty high on the priority list
11 because you have demonstrated exposure to a vulnerable
12 population. And if there's no toxicity data, they may be
13 harmless. We don't know. That's grounds for doing some
14 sort of data calling or whatever the California equivalent
15 thereof to see whether or not we ought to be worried about
16 them.

17 Thank you, Chairman.

18 CO-CHAIRPERSON CARROLL: Very good. Thank you,
19 Rich.

20 Mike.

21 PANEL MEMBER WILSON: Mike Wilson at U.C.
22 Berkeley.

23 And my concern on the prioritization issue is
24 that making effective and rational -- setting effective
25 priorities requires a continually evolving information

1 base.

2 And again, getting to Maziar's point about
3 creating the capacity to account for new products looking
4 forward, new science and so forth and built in new data, I
5 think one of the key problems here is in the information
6 submittal provisions that are constrained by two words,
7 those being "upon request," and that companies would be
8 required to provide information only at the request of
9 DTSC.

10 My sense of this is that that's going to create a
11 static data set that's cumbersome and expensive, and we
12 have experienced from the Air Resources Board in the
13 consumer product survey that they've attempted to create
14 over the last several years in dealing with their VOC
15 requirements trying to gather information on hundreds of
16 thousands of products that are continually changing in the
17 state of California so that the last time they were able
18 to effectively put that data set together was in 1997.
19 And that data set is built on the same concept of
20 information that is submitted by companies to the Air
21 Resources Board on request.

22 So I want to flag this as a fundamental problem
23 that strikes at the heart of our ability to set rational
24 priorities, and make three recommendations: One is to
25 strike the phrase "upon request;" that the requirement of

1 providing that information should be a condition of sale
2 in California; and third, that there should be a fee of
3 some kind attached to the submittal of that information.

4 Thank you.

5 CO-CHAIRPERSON CARROLL: Mike, can I ask you for
6 a clarification?

7 So, essentially, you would see this data
8 submission process as being sort of an evergreen process,
9 that if there were ever any change made to the product
10 that there would be an immediate notification of the
11 state? Is that sort of what you have in mind?

12 PANEL MEMBER WILSON: That's what I have in mind.
13 And it may be that that's a process that occurs at certain
14 time intervals, so it's not a continual wash of
15 information that DTSC has to deal with. But that the
16 default is that the information comes proactively to the
17 State rather than us; the State, having to ferret that
18 information out of the producers.

19 CO-CHAIRPERSON CARROLL: Very good. Thank you.

20 I have Jae, Lauren, Megan, and Dale and Art --
21 I'm sorry -- and Dele and Art.

22 PANEL MEMBER CHOI: This is Jae Choi.

23 This is a clarification. In terms of the de
24 minimis .1 percent --

25 PANEL MEMBER LIROFF: Jae, could you speak up,

1 please?

2 PANEL MEMBER CHOI: Oh, sorry. Okay.

3 The .1 percent I like to see by weight or by
4 volume is specific, because depending on industry -- like,
5 the paint industry or gravel formulation industry, they
6 use a PHR which is a per hundred of a rating or per
7 hundred of parts, et cetera.

8 So I think we need to clarify .1 percent probably
9 by weight may be more prevalent. So that's my comment.

10 CO-CHAIRPERSON CARROLL: Very good. Thank you,
11 Jae.

12 Lauren.

13 PANEL MEMBER HEINE: Thank you. Just happy to
14 see how much progress has been made on these regs, and I
15 have a couple of comments here.

16 One is very minor, but I'm wondering in the
17 definition section if you should include chemical groups
18 in your definition of a chemical concern or chemical under
19 consideration or chemical classes. I have a concern that
20 as lists are generated, the use of known toxic chemicals
21 may result in switching to related chemicals that are
22 structurally very similar that aren't as well
23 characterized and might not make the hazard list.

24 And so it's very important to say consider
25 whether you're talking about aldelco vanilla phocolates

1 (phonetic) or something like that to consider them as a
2 class and to require that the burden of proof -- it
3 requires more data to show that the chemical does not have
4 the same hazard characteristics as its cousins. And I
5 think that might be something you might want to write into
6 the definition of the chemical under consideration.

7 Just wanted to say, too, that I think it's
8 important to distinguish between scoring and weighting and
9 classification of chemicals that, for example, in the
10 globally harmonized system can you classify a carcinogen
11 as a Category 1 or Category 2 or Category 3. That's -- in
12 my mind, that's not really scoring and weighting. It's
13 classification. And that classification scheme doesn't
14 prevent you from changing the classification where new
15 data come out. New data come out and say, well, it's
16 actually a Category 2 and not a Category 1. Can you
17 change that? But you still need a structure of a
18 classification scheme, and that classification scheme is
19 going to be very helpful in identifying COCs and CUCs.

20 And I think the last point I wanted to make --
21 oh, I think we need a transparent process in the regs
22 about how you're going to determine when you will use a
23 lower de minimis value.

24 So, for example, there are issues around one for
25 dioxane in shampoos and baby products at the level of 10,

1 15 parts per million. That's really low. But if that's a
2 public concern or a health concern, then you need to have
3 some process. Can there be a way of nominating a look for
4 impurities or something like that? But I think that needs
5 to be written.

6 And what is the process for identifying where the
7 de minimis is lower or perhaps -- well, I don't think it
8 would be higher. But where would the de minimis be lower
9 and why?

10 And then finally, this might come up later as
11 well. I'm wondering if there couldn't be a way of sort of
12 screening out products that don't have chemicals under
13 consideration in the first place through some sort of
14 certification verification process.

15 For example, the design for the environment
16 program where they review cleaning products and there are
17 no chemicals under consideration in those cleaning
18 products, can that be a statement to the State that this
19 product does not need an alternative assessment? Seems to
20 me it as a bit of a no-brainer, because if you're willing
21 to take the manufacturer's word that there aren't any
22 chemicals of consideration, then it should be even a
23 stronger case to take a third-party verifier's word that
24 it doesn't contain chemicals under consideration. But I
25 think for those manufacturers who have already gone down

1 the path of certifying their products to
2 environmentally-preferable programs, it would be nice for
3 them to know that they're good to go in the eyes of
4 California.

5 So thank you for letting me make those comments.

6 CO-CHAIRPERSON CARROLL: Thank you, Lauren.
7 Megan.

8 PANEL MEMBER SCHWURZMAN: Sorry about that. I
9 have a well-positioned candy jar.

10 CO-CHAIRPERSON CARROLL: Megan, you're going to
11 have to lean forward toward it.

12 PANEL MEMBER SCHWURZMAN: I also want to
13 congratulate the DTSC reg writing team on making
14 tremendous strides in developing this outline. And it
15 makes it much easier for us to see into it and figure out
16 what might succeed and what might need work and
17 adjustment. So I have a few points.

18 One, I want to pick up on what Lauren just said
19 about the de minimis concentration. I had two points
20 about the de minimis. One is I think one way to get
21 around the issue that Lauren just brought up is about
22 applying a de minimis concentration only to the
23 intentional ingredients of a product -- and that means
24 that contaminants or byproducts which may be very
25 significant in low concentrations would not be subject to

1 that de minimis concentration. It's a way -- I guess it's
2 one way of thinking -- and there might be another way of
3 thinking about this -- of adding the element of potency to
4 the percentage. So some substances which are much more
5 potent you would care about in a much lower percent of a
6 product than those which are less potent. So just to
7 differentiate between potential contaminants or impurities
8 and intentional ingredients of a product may help with
9 that.

10 Second issue about de minimis is kind of what's
11 the denominator. So is this .1 percent in a hold finished
12 article. So if you're talking about a flame retardant in
13 the covering on a seat in a car, are we talking about .1
14 percent of the vehicle, at which point you would never
15 pick that up. .1 percent of a flame retardant in the
16 casing of a computer you might not pick up.

17 So there's language actually that's being worked
18 on in the European Union and I could follow up with. I
19 could look it up this evening about specifically what it
20 is. But it deals with looking at .1 percent and setting
21 the terms for the denominator of, like, the component of
22 the product or something like that that makes it much more
23 specific and easier for manufacturers to determine when
24 they hit that and less likely to just completely miss all
25 the chemical additives to something that's a manufactured

1 product that may, by weight, be much greater. So I can
2 supply those details, just not at the moment. So that's
3 all I had about de minimis.

4 I think the point I'm most concerned about in the
5 prioritization process is the current focus on data rich
6 substances. Some of that -- I understand why that's in
7 here, and I think there's some of it that's appropriate to
8 get at this point of let's act on some known hazards. And
9 I think we could usefully look at ways to add a
10 consideration of data poor substances. And maybe what
11 Lauren suggested is one piece of that, which is if we can
12 define what a functional group of chemicals can be so
13 we're not just switching from penta BDE to deca BDE,
14 because the manufacturer could say, "Well, deca behaves
15 really differently because it's not broken down in X way
16 in the environment" or something like that, which I think
17 science has totally poked holes in already. We need to
18 look at how not to just go to the less well studied
19 chemical. It's something this panel has addressed at
20 length already, but I don't see that reflected anywhere
21 currently in this outline.

22 My third point -- and I only have four -- is
23 about the minimum data set, where that's under ID, the
24 information submittal section. One of those is minimum
25 data set as defined by REACH. And that's something that I

1 think needs to be fleshed out a lot more, because I don't
2 see -- to me, it's not obvious what that means. REACH's
3 data requirements are completely volume based. And as of
4 now, there's nothing in this regulatory outline that
5 introduces the idea of volume. And so it's hard to tell
6 what that data set would be. Is it the smartest or the
7 largest under REACH?

8 And then the other part of that that's
9 complicated is a lot of the initial submissions under
10 REACH are going to contain test proposals. So where data
11 that's required is not available, the companies are going
12 to submit proposals for how they generate those data. And
13 so a lot of the initial submissions are not going to
14 contain the data that's sought after. And we should
15 consider how those test proposals are worked into the
16 information that's submitted to DTSC as if it were
17 parallel under REACH.

18 And my final point is about the III A.2., which
19 is the applicability section that there is this sort of
20 exemption that the regs are not applicable to substances
21 for which there is no exposure pathway. And as a health
22 scientist, it's almost a contradiction of terms, because
23 we have historically been dead wrong in trying to predict
24 their anticipated exposure pathways. PCBs I think are a
25 horrible lesson. And so it's hard for me to see who can

1 guarantee or prove the absence of an exposure pathway.

2 Kelly could talk with us at length about the
3 brake pad lesson also. So history is ripe with examples
4 where we've done a very bad job of anticipating exposure
5 pathways. And I think it's a mistake to think that we can
6 know and understand those in advance.

7 Thank you very much for your patience.

8 CO-CHAIRPERSON CARROLL: Thank you very much,
9 Megan.

10 Dele.

11 PANEL MEMBER OGUNSEITAN: That was exactly my
12 point about the exclusion of pathways. One can always
13 come up with a scenario where now or in the future
14 something happens and maybe one to a thousand people are
15 exposed. So unless there's good reason we currently have
16 to put that statement in, I'd rather either strengthen it
17 or delete it.

18 CO-CHAIRPERSON CARROLL: Thank you very much.

19 I see three flags. I have Art, Kelly, and Ken.
20 And I would also say, remember, we're talking about
21 prioritization of products here as well. We've heard a
22 lot about prioritization of chemicals, but put that in the
23 back of your mind this is another place to make comments.

24 Joe, I have you.

25 Art, the floor is yours.

1 PANEL MEMBER FONG: Thank you, Chair.

2 I have a couple of points and then a
3 clarification and then a comment.

4 First of all, on the issue of de minimis levels
5 of 0.1., I just wanted to follow up about what Megan was
6 saying on the denominator. As I read this, again, because
7 of the importance of harmonization, I read this as 0.1
8 percent article as defined under REACH or product under
9 REACH. And going back to Megan's concern about 0.1
10 percent, in a car, you would never get to that particular
11 bright line.

12 In terms of definition for REACH, that is the
13 article a product that's manufactured or imported. So
14 let's say I'm Volvo and I'm using some particular flame
15 retardant, when I buy, let's say, a radio from another
16 manufacturer, that would be considered imported or
17 manufactured article, not the car itself. So in fact,
18 there is a built-in under REACH definition of the 0.1 de
19 minimis level that would alleviate this 0.1 percent per
20 car kind of concerns. So I think that's an important
21 clarification that needs to be somehow build into the
22 language. And I'm sure it will be.

23 My second point is you mentioned this is also
24 related to products, not just chemicals of concern. It's
25 on page 7 on the very bottom. Odette mentioned the issue

1 of workers, and I think it's important for us to
2 understand what the work exposure scenario is under this
3 particular regulation. I think we at some point had
4 discussions about workers. Is it exposure to chemicals
5 that would be used in manufacturing the processes? In
6 reading this, I read that not to be the case. But that's
7 a very important point of distinction.

8 Workers exposed, as I read it now, that
9 potentially might be exposed to the product or emissions
10 from the product. So that's completely different from
11 manufacturing or processing chemicals which would be under
12 other types of occupational health regulations, and also
13 certainly within the IT industry under engineering
14 control. So another point that needs clarification in the
15 regulatory language.

16 One comment I have is on page 8 about existing
17 alternative assessments that have been done. I think we
18 need to emphasize the fact that it's not a
19 one-size-fits-all situation. That when we put say
20 something, let's say, onto the DTSC website that says, oh,
21 yeah, validated or an alternative assessment based on peer
22 reviewed data has already been done, the problem, and then
23 somebody may misread that to mean, in fact, that's
24 applicable to your particular situation.

25 So something that's been done, let's say, by --

1 let's take the case of flame retardants. That alternative
2 assessment that has been done, let's say, for furniture
3 foam just because that is effective and valid, that's not
4 directly translatable to use of the same flame retardant
5 in an IT application. So I think it's important that we
6 have alternative assessments that's already been validated
7 somewhere that's publicly available, but I think it's
8 important to point out it's not a one-size-fits-all
9 situation.

10 Final point I have is responding to Lauren's
11 comment about groups of chemicals and about functionality.
12 And Megan pointed out the thing about the various DPDEs,
13 and I think again that's a really great idea, but I think
14 we need to be careful of this. So, for example, in terms
15 of groups of chemicals, in fact, there's data that
16 demonstrate that the various chemicals within a group show
17 similar kinds of toxicity effects. I think that's a great
18 way to go. So, for example, instead of testing every
19 single nickel compound there is -- you know, so grouping
20 nickel would be a good thing.

21 But let me give you an example where that might
22 not work. So even a class of fairly well-known compounds
23 which has members which are well-known carcinogens, the
24 polycyclic aromatic carbons, the slightest change in one
25 single atom or even an electron dispersion within the

1 molecule itself can change a potent carcinogen into a
2 compound which is not carcinogenic.

3 And OEHHA and DTSC has done a tremendous amount
4 of work on mechanisms of action and, you know, placement
5 of -- how the placement of atoms can effect the
6 carcinogenic potential.

7 So a single grouping, it's a great idea, but I
8 think we also need to be careful, because I think even
9 within groups some whose members have been shown to be
10 toxic or carcinogenic or hazardous, the slightest change,
11 you would still be within that group of chemicals but in
12 fact change the tangible biological properties.

13 Chair, thank you very much.

14 CO-CHAIRPERSON CARROLL: Thank you, Art.

15 Kelly.

16 PANEL MEMBER MORAN: Thanks.

17 I'd like to do a couple of me toos and then I've
18 got two main points.

19 The me toos are the no exposure provision. I
20 agree with many others and could provide a whole long list
21 of examples and mistakes in that area.

22 The de minimis, I agree with what Lauren said
23 about trying to set that by product. I think you've got
24 that in here and I think that's a better approach.

25 A great example of where you failed would have

1 been -- most people don't know this, but there used to be
2 dioxins in automobile tires. So if you start with this .1
3 percent, you never would have gotten the information from
4 the people who made the tires that the dioxins were there.
5 But going and doing it on a product basis allows that to
6 occur.

7 I agree with the department's current approach
8 that the weighting is not in the regulations for any kind
9 of prioritization scheme. And I'm very concerned even
10 about tiering, because I think it could remove the
11 department's flexibility to select the biggest problem.
12 They want to solve a problem. It's already solvable
13 through this process. The department should have the
14 capacity to solve easy problems as well as hard ones,
15 because some of those easier problems have severe economic
16 consequences or really important environmental
17 consequences.

18 So I think the way the department is laying it
19 out is we're going to consider all these factors but we're
20 going to pick a menu of things is a really strong approach
21 for a long-term program for the State.

22 And I really don't want us to fight the last war,
23 which is what we do when we rank things.

24 I have to say I support the functional group
25 concept. I recognize what Art is saying, and I think the

1 department is smart enough to know the difference about
2 how it picks groups. And I think it's important that the
3 department be able to do that so it can tackle some of the
4 hard problems we have. For example, a lot of folks are
5 concerned about flame retardants. There's a variety of
6 different classes of flame retardants with different
7 chemistries, all of which are problematic. If the
8 department picks one and not the others to list, every one
9 will transition to the other ones automatically. So if
10 you want to guarantee blowing it, this is how pesticide
11 regulation works. We regulate one pesticide and everyone
12 moves to the next one. We just change the pollution
13 problem.

14 And I think the functional grouping thing is
15 really important, because that means the department can
16 work through this issue in an intelligent way with the
17 folks who are using them for the various kinds of products
18 and really come up with a solution that advances society.

19 So on to my specific points of one is -- I'm the
20 person who seems to be talking about environmental end
21 points instead of human end points in this Committee, so
22 I'll be making my environmental points here.

23 And one of those is that when the department is
24 setting priorities, it's really important the department
25 be able to prioritize solving environmental problems, so

1 ones that are real and documented and ones that can be
2 readily predicted. And some of those are ones that your
3 fellow State agencies list.

4 I tend to use water quality examples. So we have
5 something called the 303(d) list. It's a section of the
6 Clean Water Act. And there is a list of chemicals that
7 are impairing water bodies across the state. And some of
8 those pollution problems are related to products. And the
9 department needs to be ready to solve those.

10 I think the department also needs to be ready to
11 solve compliance problems, for those are not necessarily
12 equal to a proven environmental problem. And it's often
13 easier legally and mechanically to make the case there is
14 a compliance problem.

15 So, for example, under the Clean Water Act, there
16 is a structure that says the sewage treatment plant can't
17 put more than so much silver out into the environment.
18 And you might not have the 303(d) listing, but you might
19 have a lot of sewage treatment plants violating the silver
20 effluent limit because people are using these silver
21 treated fabrics and the silver is washing down the drain.
22 And that's something that's a compliance problem that
23 might not necessarily be proven environmental harm at that
24 point. But the cost to society could be billions of
25 dollars to respond to that.

1 It's also a problem that can be readily predicted
2 and prevented before it occurs. So if there is not a
3 problem with those fabrics, no problem. But if there is
4 and it can be predicted, the department should be in there
5 making sure that is managed so that the kinds of uses of
6 that material don't cause that problem.

7 The other part --

8 PANEL MEMBER RAPHAEL: Kelly, can you reframe
9 that a little bit? I heard a problem statement but not a
10 solution. Can you say what -- are you suggesting that you
11 add criteria that are missing?

12 PANEL MEMBER MORAN: Yeah. So basically that
13 falls into a couple of pieces. The first is that the
14 department should be able to obtain lists of where their
15 environmental problems are that are known that are
16 documented by fellow State agencies and elsewhere. So we
17 know that. I've given the 303(d) list as an example. So
18 that's one. I'm sure there are other lists across State
19 government agencies, including gamed agencies like Fish
20 and Game.

21 The other is we need to be making sure that the
22 department gives it the authority to handle problems that
23 can be predicted, like environmental compliance problems.
24 And I would add to that problems that might add a lot of
25 cost from municipalities. There are problems with

1 contamination of green waste that are contaminating
2 compost that may actually threaten the market for compost
3 reuse, which threatens AB 939 compliance, very long chain
4 of things. But the department needs to be able to get in
5 there and help deal with all kinds of other media problems
6 that we have.

7 The last comment I want to make is also a broad
8 comment, which is that I just really appreciate the folks
9 in the department and their experience in thinking. And
10 when I read this, I immediately see how knowledgeable they
11 are about solid waste and human health. And so it just
12 rips right out at me, wow, they know all of this stuff.
13 And then when you read it from the other perspective,
14 which the fields I've worked in where I'm looking at
15 environmental end points, water quality and other
16 environmental end points, I say, wow, we need to do the
17 same thing to bring in that same skill set to beef this
18 up. And this is actually a comment that starts in the
19 prioritization and works its way all the way through.

20 And an example of that is, in the prioritization
21 section, there is a whole list of hazard traits that are
22 laid out for humans: Carcinogenicity, genotoxicity, yada,
23 yada, reproductionexicity. There needs to be a parallel
24 for ecotoxicity.

25 I can quickly frame it for water quality. If

1 you're doing aquatic toxicity, you'd be looking at
2 toxicity to fish and vertebrates and plants. You'd be
3 looking at end points of survival growth, reproduction.
4 There is a variety of other end points that are developing
5 that are important: Swimming behavior, other kinds of
6 things. We just need to establish those parallels in here
7 so the same way you've done all that thinking about human
8 health. I'm sure your fellow agencies like the Water
9 Board and Fish and Game would be able to come in and help
10 you come out with that equivalent.

11 The other place that really plays out is on page
12 6. It's the section 3.C.3. This really leapt off the
13 page for me. This is the section that says in developing
14 the initial list of chemicals of concern, the department
15 shall only choose from the following groups. And I guess
16 I would question this entire department why the department
17 would wish to tie the hands of the next administration.

18 But the reason this leapt off the page for me is
19 that many environmental problems don't involve things that
20 are human PDTs, human Prop. 65 chemicals. And these are
21 the things the folks in water -- I can tell you right now,
22 having this here would preclude the department's ability
23 to regulate copper and brake pads.

24 So you would be writing this in and saying we
25 will not in the near term solve this problem through any

1 kind of regulatory program. And copper and brake pads
2 actually needs an immediate solution. But there are lots
3 of other water pollution problems that have to do with
4 just immediate toxicity of a particular chemical. And so
5 other examples of that, there's a lot of other sewage
6 discharges, swimming pool discharges, cooling tower
7 discharges. There are a lot of other things that just
8 cause acute toxicity and violation of water quality
9 standards and impair ecosystems. None of those would be
10 included here.

11 So my recommendation would be to completely
12 delete this section and rely on the fact that the
13 department will be smart in selecting where it's going to
14 go, but not to preclude solving environmental problems and
15 working with your fellow agencies.

16 So thank you.

17 CO-CHAIRPERSON CARROLL: Thank you, Kelly.

18 Let me go ahead and review the bidding at this
19 point. I have Ken, Joe, Anne.

20 Mike, you have your flag up for a second
21 intervention. I'd like to take those who haven't spoken
22 first, if that's okay.

23 So I would then have Roger, George, and Tim.
24 Okay. Okay. Very good.

25 Ken, the floor is yours.

1 CO-CHAIRPERSON GEISER: I'd like also just to
2 echo the feelings of the others on the Board that have
3 said basically this draft and this work seems to be going
4 very well. And congratulations to the staff.

5 I just have one area that I'd like to speak about
6 a bit, which is how the current text would go about
7 thinking of identifying products under chemicals of
8 concern, I guess products under consideration on page 7.
9 I think this is stated -- there is a simple sentence here
10 that the department will go ahead and identify them, as if
11 that was easy. And I want to just note just how difficult
12 that is.

13 There's two points that that comes up in. One is
14 how does DTSC know what products contain chemicals of
15 concern? And secondly, how do people out in the market
16 know whether their products contain chemicals of concern?
17 Both of these I think need a lot more development in the
18 actual draft itself.

19 At one point, I think we were thinking that the
20 department would call upon manufacturers to tell the
21 department whether products contain chemicals of concern.
22 And because it's sort of blind to that, at least in the
23 text as it is, I'm not sure whether that's still an idea
24 or whether the department is now solely responsible for
25 gathering that data and determining whether there are

1 chemicals of concern in products or identifying products
2 that I like that.

3 This raises the whole question. If you look at
4 some chemicals, formaldehyde, or chlorinated compounds or
5 even mercury or things like that, it's very difficult to
6 know all the products that may be in commerce in
7 California around that have elements because it so
8 ubiquitously is in products.

9 So, to me, a better way to deal with this is to
10 make it either more of a shared responsibility in which
11 industry and the department are working to identify the
12 products that contain chemicals of concern so that you're
13 tapping real people. When we tried to do something like
14 this in Massachusetts on our five chemicals, we rolled out
15 as many of the players as we could and just spent a couple
16 of days grilling people about where are the chemicals in
17 these products and trying to get that information out on
18 the table. That information then becomes valuable to the
19 many others in the state who are going to have to certify
20 these products at a later point as to whether they do
21 contain any of the chemicals of concern.

22 So I guess my point here is to spend a little
23 more time thinking about that additional piece I guess.
24 And this is something we know through the Green Chemistry
25 and Commerce Council is just the difficulty that even

1 manufacturers being able to find out from their suppliers
2 whether there is a chemical of concern in the product
3 itself.

4 So again, I just don't like the feel here that
5 this should be just the department's responsibility. I
6 would open it up, try to find multiple ways of getting
7 that information out and definitely encourage more
8 participatory process in doing that.

9 CO-CHAIRPERSON CARROLL: Thank you, Ken.
10 Joe.

11 PANEL MEMBER GUTH: I admire Ken's ability to
12 limit himself to one point. I'm sure he has many others.
13 So that will have to be something I learn as I go.

14 On de minimis, I think she makes the idea
15 focusing on intentionally added ingredients interesting,
16 but I sort of come out in the opposite place as she did,
17 because to me, the issue -- the problem with trying to
18 address all ingredients is that there are some chemicals
19 present in products in very small quantities. And where I
20 have sympathy for the industry's problem there is if they
21 come in as contaminants or byproducts or manufacturing,
22 they come along with the water, whatever, and they're not
23 intentionally added. And to try to do analyses of those
24 alternatives analyses and figure that out structurally
25 becomes burdensome, because it can actually be large

1 numbers of those chemicals at very small quantities.

2 So I have some sympathy with the de minimis
3 threshold, but it doesn't seem to me that it ought to
4 necessarily apply to chemicals that aren't intentionally
5 added, that are added for a specific industrial purpose.
6 I mean, the point -- focusing on alternatives analysis as
7 a structure for chemical policy as opposed to a risk
8 assessment or something else is to try to reduce hazard.
9 That's the goal. And to focus -- to allow a sort of
10 blanket exemption for certain concentrations just seems to
11 fly against that. And also I think the burden -- this is
12 not so high on industry to require alternatives analysis
13 or COCs that are intentionally added for specific
14 industrial purpose even if it's at low volumes. So that
15 would be a suggestion that I have.

16 And the other thing I'm trying to define is what
17 is intentionally added for specific industrial burden of
18 proof would take some work. But there is a concept there
19 that might be workable.

20 On the point that several people have raised
21 about exposure pathways and not -- wanting to avoid that
22 being used as an exemption, I agree with that and I would
23 apply the same criticism to use of intermediate products
24 in the scope, Section 1.A.2. I mean, intermediate --
25 whether a chemical is an intermediate or the number and

1 variety of exposure pathways, those are all important
2 concerns, but I wouldn't put them in there as this
3 threshold almost jurisdictional level exemption. Those
4 concerns can be folded into the process at the appropriate
5 place.

6 I want to second or third or whatever the notion
7 that the data submittal ought to be structured as an
8 independent up-front requirement and not structured solely
9 as a response action. I think the provision of data
10 requirements is crucial for identifying new hazards,
11 filling data gaps, getting new chemicals into the process
12 in the first place. If it's structured only as a response
13 action, it would just never happen. It would only be
14 applied to COCs.

15 This question of use of Prop. 65 chemicals in the
16 prioritization, which is in Section 3, I guess C.2. and
17 3., Kelly, you know, I'm concerned with that, too,
18 although I understand they're using this as an initial
19 list, just a place to start. As an initial list, a place
20 to start, all Prop. 65 chemicals in a wide variety --
21 okay, you're against that. You know, to me, I'm a little
22 more sympathetic with it as a place to start as long as
23 there is actually a process that the department commits to
24 for a regular updating of chemicals. And so I'd like to
25 see a commitment to annual, you know, reviews or some kind

1 of real undertaking in the regs themselves what the
2 department is going to do and not just leaving it to the
3 future if they ever get around to it. I think that
4 provides some comfort this will actually get done.

5 Section 2 though, I really don't think it's
6 appropriate to only use Prop. 65 chemicals as carcinogens
7 for reproductive toxins. Prop. 65 is a law. There are
8 consequences for chemicals being listed and so there are
9 limitations as to having it listed. There is a whole
10 process that many people in the NGO community are very
11 frustrated with. It's too slow, cumbersome. And part of
12 those processes that make it difficult are because there
13 are a lot of consequences of a chemical being listed on
14 the Prop. 65 list. This is a different law, different
15 purposes, different consequences, different goals. And I
16 just don't think that the same set of criteria ought to be
17 used for identifying carcinogens and mutagens. Just leave
18 it up to OEHHA in their identification of hazards, just
19 like they're going to have to identify what's a neurotoxin
20 and everything else. I would urge you to do it that way.

21 I think I'm getting down to my -- now I'm getting
22 closer to Ken's short list. Maybe that's it. That's all
23 for me.

24 CO-CHAIRPERSON CARROLL: Thank you, Joe.

25 Anne Wallin.

1 PANEL MEMBER SCHWURZMAN: Excuse me, Chair.
2 Could I just say very briefly, I wanted to go on record
3 that I actually agree with Joe. And I misspoke. And that
4 I think the de minimis concentrations to be applied to
5 impurities and not to the intentionally added ingredients.
6 That was just a complete opposite misspeak. Apologize.

7 CO-CHAIRPERSON CARROLL: Thank you.

8 Anne Wallin.

9 PANEL MEMBER WALLIN: Thank you very much.

10 I think it's really critical some clarification
11 be brought in here around some of these definitions of
12 chemicals, consumer products, products, intermediate
13 products. And then there's one that you don't have, and
14 that's a component. So, for example, flame retardants
15 have been brought up a lot. If there is a concern about a
16 flame retardant, I don't think it's very practical. And
17 this is the way I read this now -- and maybe that's a
18 misunderstanding -- to go do an alternatives assessment on
19 a car because the concern is about the flame retardant
20 used in the foam of the seat. It just takes you into a
21 process that becomes very unwieldy.

22 So I would urge you to really start to focus some
23 of those definitions so that people go and focus on what
24 you really want addressed and fixed. And I'm not even
25 sure saying that the component -- you want it done on a

1 component which is a seat assembly is really what you
2 want. That's made up of any of a number of other products
3 as well, the covering, the support systems. What you
4 really wanted to do was look at the foam. So I think you
5 need to bring some sort of funnel to bear here so that
6 folks have something that they can implement practically.

7 I appreciate a lot of the heartburn over a
8 prioritization process in terms of what's focused on
9 initially CRM and PDT seemed like a pretty good starting
10 point to me. I would not be adverse to some other
11 criteria coming in there, but I do think you've got to
12 have some mechanism that the department focuses on. I
13 don't know when it was that Ken made this comment. It
14 might be going on a year ago now. And for someone who's
15 lived this process, I think you folks started with ten.
16 This is a start. This is really hard: Ten substances,
17 and trying to do alternatives assessment. To do it well
18 and do it right and do something that's really going to
19 move you forward, not bounce you to a new set of problems
20 is an enormous amount of work. So you're going to have to
21 come down to some sort of prioritization process and focus
22 on the ones that you think are going to have the greatest
23 impact.

24 The final one that I guess I would just applaud
25 you for putting in there was a staggering of dates. One

1 of the things that I think happened in Canada is they went
2 through the evaluation of the DSL is that they did not
3 appreciate how much of that work was going to land back in
4 their lap.

5 So I think you need to think about it from that
6 perspective and how you're going to manage your workload
7 to be able to keep this moving. And I think some of those
8 staggering of dates and some flexibility in that regard is
9 a good thing so that we actually get some action, that we
10 don't study for years and years and years.

11 Thank you.

12 CO-CHAIRPERSON CARROLL: Thank you, Anne.

13 Roger.

14 PANEL MEMBER MC FADDEN: Roger McFadden, Staples.

15 I guess I'd like to begin by saying thank you so
16 much for this courageous, I think ambitious, and what I'd
17 like to frame and call leadership draft. Because I think
18 it's very courageous to take the steps that you've taken,
19 your entire team, to do this. So thank you for laying
20 this out here for us to take a look at.

21 In the area of priorities, I'd like to think that
22 the highest priority is the threat to public health,
23 because you use it consistently throughout your document.
24 But if we look at the threat to public health through the
25 lens of sensitivity of subpopulations, that keeps us

1 focused on this, doesn't it? You have to remember this
2 isn't just some esoteric public health issue in somebody's
3 frame of the context of what percentage of public would it
4 have to harm before we really do anything about it. But
5 it says we really care about the sensitivity of
6 subpopulations. So I would encourage in the definition of
7 public whatever you refer to threat to public health, put
8 it in the context of sensitive subpopulations and that
9 would really help us stay grounded.

10 The other issue is related to de minimis. I wish
11 we knew as scientists for certainty that a chemical of
12 concern when it's diluted to .1 is going to become okay.
13 I wish we knew that. I wish we could be certain that a
14 carcinogen stops being a carcinogen when we can dilute it
15 down to a level of .1. But I don't think we can do that
16 as scientists. I haven't seen that data yet.

17 In fact, I think we've seen examples in our world
18 where smaller amounts than that have been proven over time
19 to be problematic. So I would encourage us to take a hard
20 look at that and to be sure that that's where we want --
21 that if we are going to set a number, that we can back
22 that number up scientifically and we can hang our hat that
23 we're really saying, are we not, by default that in these
24 chemicals or these amounts lesser than that that it's
25 okay. Because if we are, then can we defend that.

1 So that's what I have. Thank you.

2 CO-CHAIRPERSON CARROLL: Very good. Thank you,
3 Roger.

4 I have George, Tim, Debbie, Bob, and Dale.

5 And Lauren, I see you have your flag up again.
6 I'm going to once again move you onto the list. And at
7 some point or another, I'm going to want a short
8 intervention here.

9 We are at 12:00. I would like us to finish by no
10 later than 12:25 to leave some time for Maziar to respond
11 to what he's heard. So everyone okay with that? Very
12 good.

13 George, it's yours.

14 PANEL MEMBER DASTON: Thank you, Bill.

15 So I do want to start out by commending DTSC for
16 this draft. And we've seen several drafts. And I think
17 that every single one is an improvement. And this one
18 seems to be really workable. And one of the reasons why I
19 feel it's workable is that it's practical. And you have
20 had to make some tough practical decisions and they're in
21 here. And now I've heard about an hour's worth of our
22 trying to niggle at the details to have them modify
23 something. I hope whatever you do that you retain this
24 principle of practicality in what it is that is being
25 done. So that's the spirit of my comment.

1 And I guess, to me, practicality does mean having
2 a list of chemicals and products that you can start from
3 such that you're not overwhelmed. It does mean having a
4 de minimis that's supported by previous decisions that
5 have been made after much hard debate by other regulatory
6 agencies, such as European Chemicals Agency and REACH.

7 The one thing that I have heard that I wanted to
8 comment on is where one starts -- as long as it's a small
9 enough list, ideally what we want is something that would
10 have the biggest impact in terms of public or
11 environmental health. And you know, I'm perfectly happy
12 from a pragmatic standpoint that that be these small group
13 of CMRs or PVTs. But it also might be Kelly's list of
14 things where the environmental concentrations clearly are
15 exceeding what we know are no effect concentrations. We
16 can probably also winnow down the CMR list to find those
17 things where the exposure levels are starting to reach
18 levels that we would have concern about. So that might be
19 the only thing that I would add to this is, is there
20 another filter that the initial set of chemicals can be
21 put through that really is a public/environmental health
22 filter?

23 CO-CHAIRPERSON CARROLL: Thank you, George.

24 I have Tim next then.

25 PANEL MEMBER MALLOY: Thank you.

1 I guess I should apologize for being late. I was
2 in -- my flight was canceled -- you don't want to hear the
3 story. So I apologize. So I missed a lot of the
4 discussion. So if I'm repeating things that have been
5 said, just please stop me.

6 I guess I have just a couple of general concerns.
7 First, I agree this is -- I think this is a real stride
8 forward in terms of this outline. And I think there is a
9 good balance of practicality with protection in it. I do
10 have some concerns about how it might actually work. I
11 want to echo what Ken said about the massive undertaking
12 and the way it's written -- and maybe this is what I
13 missed. The way it's written, it looks -- I kind of read
14 it as if there's going to be this first attempt at
15 creating this big list. Is that incorrect? I mean, your
16 list of chemicals of consideration then chemicals of
17 concern, is that an attempt to establish kind of a first
18 comprehensive list and then it would be adjusted as
19 information became available?

20 CO-CHAIRPERSON CARROLL: Tim, you also missed the
21 ground rules, which is we're not having a colloquy with
22 DTSC. Make it as a comment, please.

23 PANEL MEMBER MALLOY: Oh, then I'll assume it's a
24 big comprehensive list. Is that a good assumption?

25 CO-CHAIRPERSON CARROLL: Well, that's an

1 assumption you can start a comment from.

2 PANEL MEMBER WALLIN: It's okay, Tim. I got
3 whacked, too.

4 PANEL MEMBER MALLOY: I think it might be more
5 useful to think about chemicals rather than lists. So the
6 way it's written down, there's this impression there's
7 going to be this list generated. And I just feel that
8 that is an incredibly resource-intensive, time-consuming
9 effort. And I could see even just the prioritization
10 procedures taking years before we ever get to analyzing
11 specific chemicals, particularly given the fact there's
12 the information you're talking about evaluating for
13 prioritization isn't really available from any chemical.

14 So my suggestion would be to think of it more as
15 a process where the regulations are explicit. And that I
16 agree -- somebody made a mention about having some kind of
17 deadlines placed in here or milestones for so many
18 chemicals being listed in a certain time frame. And I
19 think that's a more practical approach. It's also a more
20 enforceable approach. If things aren't happening in a
21 timely manner, that gives folks an opportunity to take
22 some action to make sure that it moves forward.

23 Also it is -- I have some concern about the lack
24 of any clear decision principles for selection among these
25 factors. So I appreciate what Kelly said and I guess what

1 was said during the overview, which I won't ask about.
2 But I like the idea of that flexibility, not creating some
3 type of algorithm, and so on, so forth. I think that's
4 important.

5 But on the other hand, what I see here is just a
6 list of ideas and not any sense of what should be driving
7 under what circumstances. There doesn't seem to be any
8 kind of management principles or guiding decision
9 principles reflected in the outline. And maybe that's
10 because it's an outline. That's fair enough.

11 But I think the regulations either ought to have
12 in them or appropriate guidance something that identifies
13 how these things are going to be applied. Otherwise, you
14 know, depending on what administration may be in place or
15 who's at the agency, you could have a program that looks
16 completely different and yet is still consistent with the
17 principles that are laid out here. And I think that's
18 maybe too much flexibility.

19 The last comment I'll make on this section of it
20 is I guess I still don't see what is the operative
21 relevance of having chemicals of consideration and
22 chemicals of concern. And I guess I'll just leave it --
23 it seems that you have a set of factors. You identify
24 chemicals of consideration and then you move forward to
25 chemicals of concern by looking at those same factors to

1 figure out what is the public health threat, the greatest
2 public health threat, and then you look at peer reviewed
3 information. And then you come out with this list of
4 priority chemicals, but it's all done at the same time.
5 In fact, it looks like the public comment is at the same
6 time. The list comes out at the same time. So what is --
7 I'm trying to figure out what is the operative difference.
8 Is it it's a placekeeper that something ends up on the
9 consideration list and then moves forward?

10 And the last thing I want to say about this is
11 it's not clear to me how new chemicals are treated under
12 this. So way back in earlier straw proposals and earlier
13 discussion, there was this notion that chemicals ought not
14 get onto the market if we don't know anything about them.
15 And, really, the best time to get people to think about
16 alternatives is when they're developing a product or
17 process, not after they already have one. And the way
18 this is drafted, unless the agency builds into its ability
19 a revised list somehow, some mechanism for looking at new
20 chemicals, it doesn't look like there's any procedure in
21 here for pre-market review of new chemicals. And I think
22 that that's a lost opportunity.

23 Thank you.

24 CO-CHAIRPERSON CARROLL: Very good. Thank you,
25 Tim.

1 I have Debbie, Bob, and Dale. And then I'd like
2 to have an intervention, please.

3 PANEL MEMBER RAPHAEL: Okay. So I have some me
4 toos, but I do think -- I mean, just based on my
5 discussions about DTSC staff, sometimes the me toos are
6 important, because it gives you a sense of how broadly
7 this group might feel about something.

8 So I do want to say that under the applicability
9 sections for both products and chemicals that exposure
10 pathway really bothers me, too, for both products and for
11 chemicals. I just don't see how you can wipe something
12 out of the process by a statement. I can't -- I think of
13 it when I read this, I think because I work in a
14 government agency, I think about how I would implement it.
15 And I picture myself being at the receiving end of those
16 arguments and trying to justify them, and I just can't
17 imagine a scenario where that would -- I would feel
18 comfortable wiping something off the process.

19 In terms of the Prop. 65 definition for
20 carcinogen and reproductive toxicity, where I'm looking at
21 now is under chemicals of concern section C, number 2 and
22 3. And in both cases, you're limiting the definition to
23 Prop. 65. And I think they're different.

24 For me, in Item 3, which is this initial list,
25 I'm more comfortable with the limitation for the reasons

1 that have been said of the importance of getting started
2 with something. But the fact that, moving forward, that's
3 the only definition we have for those hazard traits makes
4 me really uncomfortable, especially considering what the
5 opening remarks were from the director who said the
6 purpose of this was to be forward looking.

7 And I don't see Prop. 65 as a forward looking
8 list. It's really a very historically based list. New
9 information can come up and I really -- and gets things on
10 the list. But as Joe Guth said, there's so many
11 consequences in Prop. 65 that have nothing to do with this
12 that I'm very uncomfortable with that limitation for
13 Section 2.

14 And then the idea of de minimis, but not only de
15 minimis. You talk a lot about using as a prioritization
16 the concentrations of the chemical in the product. And
17 really this gets into what Anne was talking about, the
18 component and what are we trying to achieve here. Again,
19 I'm thinking of this as a practitioner of alternatives
20 assessment. It's somehow got to be written that
21 denominator that Meg was talking about has to be relevant
22 to the use of a product, the use of the chemical. Is it
23 the foam? Is it the casing? That is so key to make this
24 actually a useful outcome. So I just want to say that
25 again. I heard that a couple times and I think it's

1 really important.

2 So that will be it for now.

3 CO-CHAIRPERSON CARROLL: Thank you, Debbie.

4 Bob.

5 PANEL MEMBER PEOPLES: Okay. Thank you.

6 First, I want to echo the comments that have been
7 made by several people about the progress that's been
8 made. I think this is a hugely challenging intellectual
9 problem that's being tackled here, and I think you've made
10 significant progress.

11 I would also tell you that having to grapple with
12 some of these same type of issues at the Green Chemistry
13 Institute, I have a model, and my model is nature. And
14 nature uses an evolutionary process. Not everything
15 works. You get rid of what doesn't work and you keep what
16 does work.

17 So congratulations and keep going. You won't get
18 it perfect the first time, but you've got to evolve it as
19 you go. And that's part of the looking forward portion of
20 this thing.

21 I just have one thought on the de minimis side.
22 And I've heard a lot of comments about de minimis here,
23 and I grapple with the term consistently and that's the
24 following. De minimis is not an absolute term that you
25 have a single definition that applies uniformly across the

1 board. I think you may have to look at a term that's
2 flexible with respect to the materials that you're dealing
3 with.

4 So I would have no problem if the de minimis with
5 water was ten percent. But I might not want that as my de
6 minimis if I was dealing with a PCB. So you may need to
7 think about flexibility in terms of how you apply that. I
8 know that can create some confusion in the marketplace,
9 but this can be part of the evolutionary understanding as
10 we deal with these challenges going forward.

11 I was really intrigued by a comment that was made
12 by someone, and I forget the company. But he talked about
13 the issue of unintended consequences associated with the
14 creation of liability based on participation in this
15 process. I'm not going to try to address that. But I
16 think it's something that probably there needs to be some
17 discussion around. And that's probably going to be a
18 legal question at some point in time.

19 My next point -- and I think really Tim set this
20 up very nicely for me as the green chemistry guy. And I
21 think it speaks to Debbie's point about looking forward
22 with respect to what's trying to be accomplished here.
23 And that is there is a statement here on page 15 about
24 your commitment to the twelve principles of green
25 chemistry, which I'm happy to see it incorporated there.

1 But I think there is a big difference between commitment
2 to and a practice of the principles of green chemistry.

3 So if we talk about looking forward, I think that
4 we have created lists, because in our evolution of dealing
5 with hazardous materials, that's one way the deal with it.
6 Here's a list of things that are bad. Let's identify them
7 and let's not have them. But if you think about looking
8 forward, what we'd like to do is not have lists, because
9 we have materials that don't have hazards or minimum
10 hazards associated with them. And that, for me, is where
11 finding a way to further incentivize the application of
12 principles of green chemistry to really get us away from
13 the old way of thinking and evolve to a forward-looking
14 approach.

15 Green chemistry, what we want to do is maybe
16 somehow suggest performance against a set of end point
17 criteria and that green chemistry is the mechanism by
18 which you accomplish performance against those end point
19 criteria. You reduce or eliminate the hazard based on
20 fundamental design. So I think that's my key messages
21 going forward. But support -- stronger support and
22 incentives for green chemistry provide that
23 forward-looking mechanism.

24 CO-CHAIRPERSON CARROLL: Very good. Thank you,
25 Bob.

1 Dale.

2 PANEL MEMBER JOHNSON: Yeah, I would also like
3 to congratulate you on this effort. I was really excited
4 when I read this.

5 So the one thing about both the whole process of
6 a linear approach to identifying compounds, products of
7 concern, and so forth is a large task. And I think that's
8 maybe slightly different than implementing a process on
9 the front end.

10 So I'm going to make a suggestion. And that's
11 that the process to get there is going to take some time,
12 some way to figure out how to use data, how to use data
13 gaps, how to get to this process. But you can identify
14 whether it's 25 or 50. And I would say it's more like 25
15 of the real compounds of concern that are in the
16 environment in products in California. And I would do it
17 both from a health standpoint and an environmental
18 standpoint. Just circumvent this process right away and
19 go to the implementation of those particular compounds,
20 and then see how that works.

21 And then the de minimis categorization let's say
22 would have to be relevant for those 25 products as the way
23 they affect the environment and as the way they effect
24 health. Because I agree with all the comments. Those
25 things will be different for different compounds,

1 different products, and so forth. So if you start out
2 with a good -- the issues in the state in relationship to
3 chemicals of concern, establish what the key de minimis
4 level is for that product and so forth and then implement
5 this program. Because I think you can implement it in the
6 context of this fairly quickly.

7 Then there is a linear process that goes along
8 with this, and that's updating that list as we go on.
9 What's the 26th compound now that comes onto that list?
10 How do we establish all this information? Because it's
11 not exactly clear yet how the information, the hazard
12 indicators, and so forth will be identified and peer
13 reviewed through the clearinghouse website. That's not
14 exactly clear at this point.

15 So what I would hate to see is that this gets too
16 broad on the front end that it cannot be implemented and
17 then we lose this entire process along the way.

18 And I forgot who said this on the front end, but
19 everybody is watching us on this one. Everybody is
20 watching the state of California how this works.

21 So what I would like to see is just circumventing
22 around this thing right away to identify those. And I
23 think it probably is 25. I don't think it's more than
24 that. Twenty-five of the most concerned compounds,
25 implement the process, and then establish how this is

1 going to work. Because what you will see is there will be
2 different levels of concern, concentrations in
3 relationship to the environment, in relationship to human
4 health. So it's not a -- there's not a set guideline that
5 can be used. So this will take time. But what I would
6 hate to see is it gets too broad on the front end and too
7 many things put into it.

8 It's kind of like a bill in Congress. It's too
9 much stuff goes into it on the front end that you actually
10 can't implement it on the back end.

11 So that's my comment. Implement this thing on
12 the 25 most chemicals of concern, and then start the
13 process, the linear process.

14 CO-CHAIRPERSON CARROLL: Very good. Thank you,
15 Dale.

16 I just want to check here to make sure Ann Blake
17 and Tod and Julie, you do not have a comment at this time;
18 is that correct?

19 Very good. Thank you.

20 I'd like to take just a minute. I think we're to
21 some extent we're at the point in the process where
22 everything has been said but not everyone has said it yet.
23 And I don't want to do a lot of reiteration, but there are
24 some points that I would like to make.

25 In choosing the chemicals -- and I think Dale

1 makes a very good point about putting a number onto this.
2 Whatever process is used, I understand the need for white
3 space. I understand the need for flexibility. But there
4 has to be some structure. Because if you are the person
5 who ends up on the list and your competitor's product
6 that's very similar doesn't end up on the list, there's a
7 consequence. I believe there will be a consequence for
8 the materials that are named as chemicals of concern even
9 before the process starts. And you will see resorting
10 done. So don't think for a moment that putting something
11 on the chemicals of concern list is no harm, no foul.
12 Things will start to happen immediately.

13 I'm concerned after listening to some of the
14 discussion in the panel, while respecting the point of
15 view and where it comes from and the logic that
16 implementing the things that you've heard from some of my
17 colleagues, would start you down an inexorable slide
18 toward the disadvantages of straw two. And here's what I
19 mean by that. We're all pretty sure that when chemicals
20 of concern are named, there will be some immediate evasive
21 substitution. If the remedy for that then, as has been
22 suggested, is to say, well, we're going to pick everything
23 that is a certain functional group I think was the term
24 that's used, which is reasonable response.

25 On the other hand, depending on how you picked

1 that -- let's say you take everything with a carbon
2 needle, we now all of a sudden are back to 10,000
3 chemicals on the list. And if this is not done very
4 carefully, and once again, with some kind of process for
5 deciding how you're going to go about doing it, you wind
6 up with many more chemicals of concern early on than you
7 can reasonably deal with and you lose the focus, which is
8 as Dale pointed out to pick some things that are bad and
9 work on them. So that is a concern.

10 I have some concern for review of the decision
11 with respect to chemicals of concern. Public comment is
12 wonderful, but that's simply a comment. And I'm not sure
13 you have any recourse as a result of having been put on
14 the list.

15 I'm going to talk a little bit more about
16 reformulation and applicability when we get to the
17 alternatives assessment part.

18 I want to make a little statement about de
19 minimis. My concern about de minimis from the beginning
20 has been particularly for the inadvertent materials. And
21 let's say you're in the process of making PET plastic and
22 you start with ethylene and it goes to ethylene oxide,
23 which is a carcinogen. But from there you make ethylene
24 glycol and ethylene glycol is polymerized into PET.
25 Question: Can I guarantee there are no molecules of

1 ethylene oxide, a carcinogen, in that material? And the
2 answer is no, I cannot guarantee you there are no
3 molecules.

4 On the other hand, if there were de minimis
5 concentrations in that article that you could agree on is
6 really not of consequence, it would take you a long way in
7 the implementation of this. So perhaps it's true that in
8 order to set your de minimis -- and particularly for those
9 inadvertent additives, you might want to consider the
10 hazard. You might also want to consider the potential for
11 exposure. I'm not even going to mention the "R" word.

12 Finally, one of the things that I found is a
13 little bit strange here and probably because I don't
14 understand how you wind up on this list. But
15 eliminating -- in IV C.2., products that at the end of
16 life are prohibited from solid waste landfill disposal in
17 California, I'm not sure of the standards by which you end
18 up on this list. Because in so doing, you may be bringing
19 lots more into the process than you wanted to bring in
20 almost by what amounts to a back door -- no pun
21 intended -- for that.

22 And that's the end of my comments.

23 We're at 12:25. What I would like to do is offer
24 those who have a flag up for a second time one minute for
25 a comment, and then I'll turn it over to Maziar.

1 Mike, you're first.

2 PANEL MEMBER WILSON: Thank you. It's Mike
3 Wilson from U.C. Berkeley.

4 And again, I think this gets to a point that a
5 number of the members have made and Ken, in particular,
6 developing a list of consumer products and categories that
7 contain chemicals of concern and that the whole process of
8 prioritization is going to require an information base
9 that you said, Bill, is evergreen.

10 So I wanted to make two comments again on this
11 information submittal requirement section and propose a
12 couple of solutions. As Meg Schwurzman commented, the
13 problems of assigning the information and data sets to
14 REACH, being that those are based on data toxicology, in
15 many cases volume based and also result of a political
16 compromise, not necessarily based on the newest science
17 that those under scope 1.D. that the chemical information
18 and the minimum data set be ascribed to OEHHA and that
19 OEHHA define those for DTSC.

20 The second point under scope 1.D. is on chemical
21 and consumer product marketing data, that hazard data is
22 gradually going to improve in its richness, if you will,
23 over time, but that chemical and consumer product use data
24 is unique to California and is critical to understanding
25 and setting rational priorities that, as many of us

1 said -- and Roger, in particular, actually identifying
2 substances of real health and environmental concern. And
3 so at the same time, that information is highly sensitive
4 to businesses.

5 And so I would propose that D.4., chemical and
6 consumer product marketing data, be carefully stipulated
7 in the regulation to include five key points: The volume
8 of the product sold or the unit sold; where those products
9 are sold; for what purpose; what is the end of life
10 disposition; and what is the contact of the point of sale,
11 the contact information.

12 And then my final point around information
13 submittal requirements being that one of the I think core
14 elements that this regulation can contribute to the
15 chemicals market and the potential power behind it is the
16 ability to move the market towards safer substances. And
17 so as much of this information that can be made publicly
18 available is critically important and recognizing the CBI
19 issues and so forth that anything that we can do within
20 this regulation to drive the information into the market,
21 the downstream issues will be of benefit.

22 CO-CHAIRPERSON CARROLL: Mike, are you winding
23 up?

24 PANEL MEMBER WILSON: That was my last point.
25 Thank you.

1 CO-CHAIRPERSON CARROLL: Lauren, please be brief.

2 PANEL MEMBER HEINE: I will. I want to build on
3 something that Mike said about allowing OEHHA to define
4 the minimum data set. But also consider defining the data
5 quality, too. This is something that EPA has done. They
6 have a convention for identifying when you have a high
7 weight of evidence on the data and when there is a lower
8 weight of evidence. For example, if something is the
9 result of screening tests or estimation models, you can
10 indicate it's a lower weight of evidence. But those
11 information are still very valuable. You don't want to
12 not use them because they don't reach some high bar of
13 information. It's still useful to have access to
14 screening information. And I would like to see them
15 included in this and maybe indicate that it's a lower
16 indicator of evidence.

17 And the other point is in section 38.A.4., I
18 think it's probably in here. And I'm sure that DTSC and
19 OEHHA have thought about it, but I think it might be
20 important to call out that it's important to look at not
21 only the potential fate and transport, but to also look at
22 transformation products. A number of chemicals of concern
23 are chemicals of concern because of what they turn into in
24 the environment, not because of what they are when they
25 start as an appearance compound. So I think maybe there

1 should be some mention of that in the regulation so that
2 that is considered as well. And I think it is inherently,
3 but I think it might be good to point it out.

4 CO-CHAIRPERSON CARROLL: Thank you, Lauren.

5 I have Kelly, Bob, and Dele. Very briefly,
6 please.

7 PANEL MEMBER MORAN: I want to go back to the
8 discussion about environmental stuff in the Section 3.A.3.
9 I think what I heard several people say is that they would
10 advise the department that CMRs are a good starting place
11 for human health. I don't think I heard that you were all
12 recommending the department specifically not work to solve
13 any environmental problems through this regulatory
14 process.

15 So I'm looking for nodding heads there.

16 I don't think you want to say that. And the
17 reason you don't want to say that -- I'll just use the
18 brake pad example. Not only is that brake pad the main
19 source of copper in watersheds throughout California, it's
20 got adverse effects on salmon, which are engaged
21 throughout California watersheds. The compliance costs
22 that are occurring immediately now are on the order of
23 billions of dollars. In fact, we estimate that probably
24 over \$100 billion statewide. And those costs are starting
25 to be incurred today. And we heard some testimony about

1 what will happen if those costs start being incurred by
2 municipalities across the state, which is they're going to
3 go sue the manufacturers. So there's really good reason
4 other than just nice environmental reasons that we want to
5 make sure the department maintains the authority to
6 provide timely response to these kinds of problems.

7 As I mentioned before, I think the brake pad
8 problem needs to be solved so quickly it will probably be
9 handled through legislation this year. But there are
10 other environmental compliance problems out there that are
11 like that.

12 And I agree and support the idea of starting with
13 the CMRs on the human health side, but I think we need to
14 leave the department. So deleting this section allows the
15 department to take our advice and select priorities, but
16 allows it to select both human and environmental
17 priorities and be able to solve real problems.

18 CO-CHAIRPERSON CARROLL: Thank you.

19 Bob.

20 PANEL MEMBER PEOPLES: Thank you, Chair. I'll be
21 quick.

22 The difference in my mind -- there is a
23 difference in my mind between existing products and
24 chemicals which lead to chemicals of concern and new
25 products and chemicals that are introduced into the

1 marketplace. And to the extent you can find a way to
2 differentiate maybe through the principles of green
3 chemistry, we can avoid the creation of unintended
4 consequences in the future as we deal with the problems
5 that we've already got from the past. That's a short
6 statement of a long issue.

7 CO-CHAIRPERSON CARROLL: Thank you for being
8 brief, Bob.

9 Dele, you have the last comment.

10 PANEL MEMBER OGUNSEITAN: I'll be brief, too.

11 Thanks for bringing up the example of outside
12 manufactured PET. I wasn't sure if that is what is
13 intended under Section 1.A.2. as an intermediate product,
14 because it's not defined under Section 2 or if that's an
15 intermediate chemical. So that clarification I think will
16 be very helpful.

17 CO-CHAIRPERSON CARROLL: Very good. That brings
18 us to the end of the list. I want to turn it over to
19 Maziar for any comments you'd like to make at this point.

20 DTSC DIRECTOR MOVASSAGHI: I appreciate the panel
21 members discussion. And folks, this is exactly the kind
22 of stuff that helps us right now.

23 To my staff that's listening to us on the web, I
24 know I can hear the delete button on some words and
25 re-writing is happening. I can just feel it right now.

1 There's two things I can address really quickly.
2 Some folks brought up this issue of, well, if you have all
3 this flexibility, you can't implement this prioritization
4 without having some weighting and scoring going on. What
5 I meant by flexibility doesn't mean we do away with the
6 weighting. The weighting will be explicit in the draft
7 document that goes out. Says, "Well, we looked at this
8 data. This is how we weighted the data and resulted in
9 these chemicals and products falling into these
10 categories," such that if we have over-weighted public
11 health to the detriment of the environment, we would have
12 got comments saying, "Wait, you're too focused there.
13 You're not balanced."

14 And it goes to the question that Tim brought up.
15 What's the point of having the chemical of concern and
16 chemical under consideration is two fold? We heard a
17 number of you say this and we heard this from industry
18 members as well. The minute the chemical shows up on that
19 list, no matter where it is on that list, there's going to
20 be incentive to move out of it. But in order to be
21 practical in how we move forward, we needed to create a
22 little bit of a parking lot saying, well, based on the
23 weighting we do because of the data that's available and
24 we looked at these chemicals or these products go into the
25 parking lot that's the under consideration category, but

1 these chemicals and products are in the concern and move
2 to the regulatory driver.

3 Our hope is that we keep manageable our workload
4 through the chemicals of concern and priority products,
5 but we do hope that manufacturers want to take the
6 incentive and say, well, California's identified these
7 products and chemicals in the parking lot. Let's see what
8 we can get out of it.

9 There was a number of wonderful examples brought
10 up adding information about like 303(d) lists. Wonderful.
11 I just got confused between the discussion between Joe and
12 ming. So let me catch this right. Should de minimis
13 apply to intentionally added products or intentionally
14 added ingredients? No. Okay. Got it.

15 CO-CHAIRPERSON CARROLL: All right. Very good.
16 Thank you, Maziar. And thank you to all of you.

17 The panel and staff will meet up with their lunch
18 in the breakfast room, which is out toward the lobby. We
19 will convene again at 1:45. It is 12:35 now. Please
20 enjoy your break, and I will see you in an hour and ten
21 minutes.

22 (Thereupon a lunch recess was taken from
23 12:35 to 1:45 p.m.)

24
25

1 what we're doing, is this part of our regulatory proposal.
2 One of the most important things regulators do is we copy
3 and cut and paste like there is no tomorrow from other
4 regulatory programs, and we have none in the world to draw
5 from. So this is really someplace where we've had to
6 exercise creativity, ingenuity, and we've had some very
7 spirited discussions internally.

8 But this is one part where we really, really need
9 some feedback and input from this body. Anything from,
10 "You're on the right track on this part." "You're not on
11 the right track." So combinations don't work or sometimes
12 we're afraid that we might not see inadvertent, unintended
13 consequences.

14 So the type of questions we need answered -- I
15 think it was also one of the public commenters this
16 morning brought up the issue about what are the bounds of
17 alternatives assessment. You've heard me talk about
18 giving some choice to manufacturers, but you know, how
19 much latitude should be given.

20 The other point we've heard, I think Kelly raised
21 this and the other practitioners of AA, how do you ensure the
22 quality of data that comes in. There's a lot of
23 assumptions that go in. There are a lot of factors that
24 go in. When we're sitting down and reviewing this, there
25 is a good likelihood that the DTSC staff person reviewing

1 this report might not have ever conducted an AA for the
2 first couple of generations. So what kind of tools can we
3 build in to allow for data quality and assurance? We
4 bandied about third-party certification, some other tools.
5 But what else can we use out there?

6 The other key component that I think we need to
7 be cognizant about, even if there are no specific
8 recommendations, is that we will not fully make the entire
9 raw AA data available publicly. There is going to be
10 priority trade secret CBI informations in there. Absent
11 that ability to be able to be fully transparent, how does
12 a government agency demonstrate its accountability and its
13 responsibility to watchdog groups, to stakeholders, or
14 even other businesses that are or are not going through
15 the system? What is it that we can do to again ensure the
16 quality of the data coming in, appropriate meets and
17 bounds and such, for folks to have confidence in our
18 program? Because, at the end of the day, we need to have
19 others come along with us so when we assign a regulatory
20 response there is some meaning behind it as well, not all
21 kinds of second guessing is going on.

22 So with that, I'll turn it over to the group.
23 We've made an attempt at writing something, but like I
24 said, this is one part where we really need a lot of
25 feedback on.

1 CO-CHAIRPERSON GEISER: Thank you.

2 There is a dilemma here that I think that we face
3 with this area. And I just want to state it the way I
4 sort of see it. And that is I think the way the law is
5 written and the way that many of us think, we believe that
6 alternatives assessment is probably a very good idea.
7 It's certainly a very good idea in helping to direct
8 people to not end up with regrettable solutions as a way
9 to sort of manage a logic process and looking for
10 alternatives.

11 We think there's some potential in terms of
12 opening up innovative new ideas that wouldn't have
13 occurred to affirm, et cetera. And yet at the same time,
14 the way the logic is working is in order to do one well,
15 it's laid out as a fairly complex and comprehensive and
16 time consuming and big process, and not the least of
17 which, public process. And almost all of those things
18 tend to go against the idea that a firm would want to do
19 this. So I think we've got to find a way to make
20 alternatives assessment really work for the bill, rather
21 than to become an incumbrances in the bill.

22 But we have a very interesting recommendation on
23 this we're going to take up here, which is sort of a model
24 that a couple of us have worked on. But I think that our
25 idea would be just to have a general discussion first and

1 then ask Kelly to introduce this little piece that some of
2 you have seen in the packet itself.

3 So what I think we want to do is on questions of
4 boundary, data quality, decision, complexity, publicness,
5 who does these? What are your thoughts? How can you help
6 the staff think this through? Let's just have an open and
7 general discussion at this point. We'll take cards.

8 Dale.

9 PANEL MEMBER JOHNSON: You want me to start?

10 CO-CHAIRPERSON GEISER: Yes, please.

11 PANEL MEMBER JOHNSON: Okay. One of the things
12 that I thought was a little bit problematic was if you
13 read through this and then you kind of test it a little
14 bit with this alternative chemical that you're going to
15 come in with, it's clear that you could enter into the
16 alternative assessment with a compound with no data. And
17 because you know you set up chemicals of concern and lists
18 and they're based on data and everything else, so a
19 chemical without any data would not fall in one of those
20 lists. So it would actually then enter in through the
21 front end of an alternative assessment. I think it would
22 be knocked out later, but what it does, it sets the
23 process going, sets a time line. It sets various other
24 types of things. Sets a lot of discussion going on. And
25 it's the wrong -- you know, it's the wrong approach.

1 So what I would suggest is that there's some
2 criteria that are set up to at least a minimal data set
3 that exists that says it would qualify as an alternative,
4 whether it's safe or not, it could go into the assessment.
5 Because otherwise, I think you would jam this thing full
6 of the wrong type of compounds.

7 CO-CHAIRPERSON GEISER: Bill, Debbie, Julie.

8 PANEL MEMBER PEOPLES: That's from this morning.

9 CO-CHAIRPERSON CARROLL: Thank you, Chair.

10 I wanted to take your initial statement just a
11 little bit further, because I was thinking as I was
12 listening to public comment this morning that it dawned on
13 me that it's entirely possible that the way this is laid
14 out you would get virtually no alternatives assessments
15 done. And here's the reasoning. We talked a little bit
16 before about what you might call an evasive substitution
17 where in as soon as something goes out for public comment
18 for a chemical of concern, you immediately find something
19 that's not a chemical of concern to substitute for it. As
20 a result, you don't have to do an alternatives assessment.

21 When you look at the difficulty of doing the
22 assessment the way it's laid out in terms of the
23 complexity in all of the categories, that you have to hire
24 a certified practitioner from a process that has yet been
25 defined.

1 The liability issue that was brought up this
2 morning, which is really profound I think, the finding of
3 a preferred alternative that at some point there's going
4 to wind up having to be some score at the end so you know
5 what is a preferred alternative versus what isn't. And if
6 you wind up having one that gets a 47 and one that gets a
7 46, which may not be meaningful in terms of the process,
8 yet it's still a difference, how does that appear either
9 in the public eye or to the department, the virtually
10 unlimited scope.

11 And I want to use the other example that came
12 from public comment with respect to plastic bottles and
13 having not just to substitute a component of the plastic
14 bottle but plastic versus glass versus metal or frankly
15 versus nothing at all, which would also be an alternative.
16 And if you take that and then at the end as I read this --
17 and perhaps I'm wrong -- but as I read this, the
18 department picks what the winner is among the alternatives
19 that you've investigated. So at the end of this process,
20 you could wind up putting yourselves out of that business
21 as a result of having gone through the alternatives
22 assessment process.

23 So it seems to me looking at that the last thing
24 in the world I want to do is an alternatives assessment.
25 And if you really want to see this as a way of gathering

1 information, there has to be some enticement for keeping
2 people in, but I'd see what it is.

3 Thank you.

4 CO-CHAIRPERSON GEISER: So there's the worst
5 case. Let's see if we can do better than that.

6 Debbie.

7 PANEL MEMBER RAPHAEL: Yeah, Bill and I often
8 have different views on things.

9 So when I read -- let's see, what number is this?
10 If I could get just everybody to look at alternative
11 assessment is 6.B.5. under proposed methodology -- and I'm
12 a little bit at a disadvantage here. Sort of like when
13 Tim was wanting to ask a question. I'm going to say what
14 I think this means and what my opinion is if I'm right.

15 So when I read this, it says, "The proposed
16 methodology for the alternatives assessment that will
17 become part of the work plan is segments of life cycle
18 system boundary that will be evaluated for the product and
19 all alternatives."

20 So when I read that sentence, the way I interpret
21 it is that the person performing the alternatives
22 assessment sets the boundaries of their alternatives
23 assessment. In other words, they can say that many of
24 these other criteria are either too challenging or not
25 relevant and therefore they're not going to address them.

1 That's how I read that.

2 And if that's true, I think it's kind of an
3 interesting opportunity for getting at this tiered
4 alternatives assessment or different levels of
5 alternatives assessment where somebody can say, "I don't
6 have the resources" or "I don't think it's relevant and
7 I'm going to set my boundaries very defined." And I think
8 the consequences of that are good. And I think that if
9 that's the case and it's narrowly defined, what I would
10 like a consequence to be is that the time for completion
11 is much shorter. So DTSC also uses that for flexibility
12 on timing.

13 So if I'm interpreting that sentence to mean it's
14 determined by the user and if I interpret it correctly
15 that I have exact opposite interpretation from Bill, that
16 DTSC doesn't choose the winners, that it's the person who
17 does the alternatives assessment who chooses the winner
18 and then the consequence of that choice is the regulatory
19 response based on the practitioner's determination on
20 what's an alternative or not. In that case, I don't see
21 that doom and gloom. I can see that nobody wants to do an
22 alternatives assessment, but I don't see it as a direction
23 towards a ban or towards getting out of the system,
24 because I read this a little differently than Bill. So
25 again, there's not really an opportunity for clarifying.

1 I would just like to say if the way I'm reading it is
2 correct, I actually like it.

3 CO-CHAIRPERSON GEISER: That's why we have
4 several co-chairs.

5 Julie.

6 PANEL MEMBER SCHOENUNG: Well, I want to echo
7 what's been said. I do worry about the evasion, trying to
8 kind a quick substitute and get yourselves off the list as
9 soon as you can.

10 But I wanted to focus on something more specific,
11 which was also in response to the comment this morning
12 about how broad of alternatives do we need to consider.
13 And I think something I don't see here that is a staple in
14 the alternatives assessment or LCA type of wording is a
15 functional unit. And I think the word "function" is here
16 in terms of what the function of the consumer product is
17 and the function of the chemical of concern in the product
18 that's in 6, 2 and 3.

19 And under B -- this is all under B.4. where the
20 scope is defined, normally part of the scope is to define
21 the functional unit. And I would think that before you
22 could decide what alternatives need to be considered, you
23 really need to know what would be an equivalent
24 alternative. So equivalence or functional unit as ways of
25 defining the starting point for your analysis I think is

1 important for the person doing the assessment to define as
2 part of that process.

3 The other thing that I'm a strong advocate for
4 that I don't see here is the need to or ability to do a
5 sensitivity analysis, the need to define a functional
6 unit, the need to define a system boundary. The need to
7 explain why or why not you did or did not include
8 something within your system boundary can often be
9 addressed by doing some pretty straightforward sensitivity
10 studies and scenarios about what if we now change that
11 functional unit or what if we change that system boundary.
12 And you don't want to look at every possible permutation.
13 But the ones where there's really a lot of uncertainty
14 about how robust the outcome of the assessment is,
15 sometimes it's nice to be able to really just say that
16 even if we change the system boundary, we still come up
17 with B is better than A.

18 But, whereas, if we consistently find that we
19 don't get a robust concurrence that one is better than the
20 other if we change the boundary conditions or change our
21 definition of functional unit or equivalence, it leaves a
22 little mud in terms of a regulatory, but it's something
23 that I would like for DTSC to at least think about if
24 there is a way to put in language that those uncertainties
25 of what that functional unit and system boundary are if

1 you can capture that and that for many variations of those
2 assumptions you still come up with B is better than A.

3 So that was my primary comment that I wanted to
4 make.

5 CO-CHAIRPERSON GEISER: Thank you, Julie.

6 Meg.

7 PANEL MEMBER SCHWURZMAN: I'd like to echo what
8 Debbie and Julie said and just frame it quiet differently.
9 This idea of putting reasonable bounds around a functional
10 unit I think gets back to some of the ways that we talked
11 about this in early discussions had to do with the idea of
12 identifying sort of hot spots in a product life cycle that
13 would be the focus for an alternatives assessment. And I
14 don't necessarily think that's something you want to
15 circumscribe by the regulation. But if we can think about
16 designing a system that enables that, that says this is
17 the major impact of the use of this chemical concerning
18 this product.

19 Whereas, if say -- that's on water, you know,
20 discharging to water.

21 Whereas, the major impact of itself alternative
22 is on energy consumption or rare earth metals or whatever
23 it is. And then because none of these are going to be
24 equivalent, you're not going to come up with one that uses
25 two gallons of water and one that uses one and then you

1 obviously choose the one that uses one gallon of water.
2 You're going to have impact on different ecosystems, on
3 different people, on different -- demands on limited
4 resources and things like that.

5 So I think the most common finding will be an
6 apples and oranges comparison. And so focusing on this
7 functional unit that allows people to identify what is the
8 primary hot spot in the life cycle of this product would
9 be really helpful in terms of simplifying it. That was
10 just to echo I think capturing -- or echoing some of what
11 Julie and Debbie were getting at.

12 The two points that I wanted to make were very
13 basis ones. One is the basic question of who performs the
14 analyses and who pays for them. And that's dealt with on
15 page 11 in the general requirement section. And that's
16 basically A.1. And I think throughout the regulations
17 it's acknowledged -- or the draft outline it's
18 acknowledged that producers, manufactures will bear the
19 burden of conducting an alternatives analysis, but there
20 are many ways of course that could be carried out.

21 And I firmly believe that a fee-based structure
22 that then funds an independent body to perform those is
23 drastically superior to firms hired by manufacturers or
24 their trade associations. You want a body that's
25 performing analyses that answers to the public rather than

1 to specific manufacturer or specific trade association.

2 And to me, that is what creates the room for
3 doing an analysis that steps beyond any manufacturer's
4 product line. And it makes it impossible to do an
5 analysis that answers the question of the alternatives
6 assessment with an engineering fix or like what Bill said,
7 "It's not necessary. Oh, this ingredient is extraneous,
8 we can just do away with it." Whereas, it's really hard I
9 think -- the manufacturer conducted alternatives
10 assessment seems to me more likely to lead to, "Well, we'd
11 like to put this drop-in chemical alternative, because
12 it's not on the chemical concern list or something like
13 that." So I'd like to support that.

14 The second point is much simpler and it's around
15 the issue of exemptions and extensions, both of which are
16 permitted under 6.A.3. and 4. again on page 11. And to
17 me, there's at this point sort of no basic requirements
18 for the criteria for requesting either an extension or an
19 exemption. And if I were a company looking at the onerous
20 task of conducting an alternatives assessment, the first
21 thing I would do is file for an extension. And if that
22 weren't granted, I would file for an exemption. So I
23 think that needs to be fleshed out in a lot more detail
24 with a lot more up-front proof of the need for such an
25 exemption or exception.

1 CO-CHAIRPERSON GEISER: Thank you, Megan.

2 So at the moment, we have Tim, Kelly, Ann, and
3 George.

4 PANEL MEMBER MALLOY: Thank you.

5 I have several brief points, and I'll make them
6 brief.

7 First, I had submitted something that's on the
8 website that has a lot more detail than what I'm about to
9 say about alternatives analysis. So I'm referring to some
10 of that.

11 But, Bill, in return to your point about people
12 dropping out of the program by switching once something
13 gets on the list, I agree that's a problem. And you know,
14 one thing I would say to think about it is requiring
15 alternatives assessment once a proposal for a list comes
16 out, if somebody used that material and switched, they
17 should be required to do an alternative assessment for the
18 change that they made without regard to what the chemical
19 or change was, whether it's on the chemicals of
20 consideration or not; right? Because the problem of
21 course is my chemicals on the chemicals of consideration,
22 I switched to something that may be just as bad but didn't
23 make the cut onto that list or whatever reason. Maybe
24 there's no information about it.

25 If that's the case, an alternative assessment

1 ought to be done of that material, whether or not it's on
2 the list or not. Because you've made the choice to switch
3 to it, we want to make sure you're doing that in a careful
4 way. If it's a benign material, one would expect the
5 alternative assessment should be relatively
6 straightforward. Maybe it would fall into one of these
7 tiered things if we use the tiered thing.

8 That's done -- for example, under the Clean Air
9 Act, when a proposal comes out to control emissions under
10 the new source performance standards, those provisions
11 apply as of the date of the proposal because of that same
12 concern, that people will simply take actions to exclude
13 themselves from the regulation in ways that would
14 undermine the goal of the regulation. So I would suggest
15 that you think about a mechanism like that.

16 I think that all this that's here I think
17 generally makes sense. My concern is that there's not the
18 capacity in the agency or industry to do this or the
19 experience to do it. I'm going to caveat that in a
20 second.

21 But my suggestion would be tie this alternative
22 assessment aspect really back to the prioritization
23 question, which is I think Dale had made the comment why
24 don't you start with 25 chemicals. And I think that's
25 right, especially for alternatives assessment. I think

1 you should start with just a few chemicals, chemical uses,
2 and have alternatives assessment done without as much
3 standardization so as to learn from that. And then as you
4 learn from that, go back in and have the regulations and
5 guidance further evolve, kind of along the lines I think
6 Bob may have mentioned.

7 And one way to do that, I think Kelly and I were
8 talking about the petition process before about that's
9 really how this could happen. One thing that strikes me
10 is why not, when you propose the regs, to take public
11 comment on what ought to be the chemical uses that should
12 be addressed in this first kind of stage of alternatives
13 assessment and pick some in the regulations and get going,
14 because I think you're going to have to get some
15 experience in order to do that.

16 The next point I would just make is there's a lot
17 of talking at very conceptual levels about alternatives
18 assessment. And the problem I'm having is getting my head
19 wrapped around any particular situation. I think it may
20 be helpful to break out your thoughts about what an
21 alternatives assessment might look like depending on
22 perhaps -- and I'm just throwing this out there -- but
23 depending on the scenario you're dealing with. Is
24 somebody using the chemical as a feedback for some other
25 process? Are they using a chemical as a component in

1 another product, like in a car seat or whatever? Are they
2 using the chemical directly for some cleaning purpose or
3 whatever?

4 And one might think that the things you think
5 about in the alternative assessment, the types of
6 substitution you might make, they might be different. So
7 it might be worthwhile thinking about the context in which
8 the chemical is being reviewed and that might help. I
9 have a lot of trouble dealing with this without some
10 specific examples of how it's being done.

11 And the last point I'd make, and for me the most
12 important is, I really feel that -- and I understand this
13 is an outline and you can't get too detailed an outline.
14 This is not a criticism of the outline itself. It's a
15 suggestion about what the reg ought to look like. I think
16 it does need a much greater degree of standardization
17 based on four principles. First, equity across the
18 industries. So the way this is written, it feels as if
19 there's some general guidance and people go and do their
20 alternatives assessment; they just get a work plan
21 submitted and approved. It seems to me there has to be
22 more standardization in the sense of we ought to get -- if
23 you've got companies doing basically the same thing, we
24 ought to get roughly the same outcome from the
25 alternatives assessment. Not always the exact same thing,

1 because contexts differ. But if the outcome is different,
2 it ought to be because of particular differences in the
3 process or the business, not differences in the model used
4 to do the alternatives assessment.

5 The second is enforceability. I don't know how
6 you review and enforce alternatives assessment if you
7 don't have kind of a standard to judge it against. It
8 seems like it could become very ad hoc. I think that's
9 worrisome for a number of different reasons. I think it
10 needs to be standardized in order to be workable. And a
11 lot of people have talked about this, that if it's too
12 fuzzy, a lot of folks aren't going to know what to do.
13 And I think that's going to affect the ultimate quality
14 and delay the program.

15 And lastly, I think it has to be standardized.
16 Look, when it comes down to it, putting aside all the data
17 collection and, you know, nomenclature of how we talk
18 about data, the ultimate decision are value choices about
19 how to weigh different attributes and make a judgment
20 about them. And I don't think a regulatory program ought
21 to be leaving those value judgments out to individual
22 entities, be they NGOs, businesses, whatever. And at some
23 point, in some format, the hard choice is going to have to
24 be made about what are the guiding principles? What are
25 the value choices that are going to guide this process?

1 And I would just suggest it's not as new as we
2 think it is. That people have been talking about these
3 issues for quite some time and we should look at things
4 like the well-developed literature on inherently safer
5 design and the tools that are available in that area for
6 making just these decisions and some other stuff, like
7 Nick Ashford has been talking about and writing about
8 technology options analysis for a long time. And I think
9 there's some really valuable stuff to find in his work in
10 terms of how do you make these things workable. And he's
11 done field studies and so on, so forth. I think there's
12 examples out there that might help us with these
13 standardization problems.

14 Thank you.

15 CO-CHAIRPERSON GEISER: Thank you, Tim.

16 So, Kelly, I'm going to ask you maybe at this
17 point if you can introduce this idea that a few of us sort
18 of talked about in terms of tiering.

19 PANEL MEMBER MORAN: Should I do that or maybe
20 just wait a minute and --

21 CO-CHAIRPERSON GEISER: Just make your comment
22 and then do that.

23 PANEL MEMBER MORAN: Oh, okay.

24 So just very briefly, there were just two small
25 things that I wanted to do before we talked about the

1 tiering thing. And one is going on the same theme about
2 ecosystems and all the other receptors other than humans,
3 just I've already shared with the department the desire to
4 make sure the alternatives assessment also takes care of
5 that. And I wanted to describe verbally an important
6 concept in this, which is the environment consists of the
7 kind of environmental effects that you might look at under
8 CEQA or NEPA. So there's 20 different issue areas. And
9 the environment consists of species that are affected by
10 pollutants. So there's ecotoxicity and the effects on
11 fish and invertebrates and plants and yada, yada, yada.
12 We can go on and on. That's one thing for which we'd be
13 looking for parallel with people.

14 And then there is a separate category of things
15 that would be the issue. My best example is the CEQA
16 initial study checklist. There's about 20 issue areas
17 that we go through. And those are bigger picture
18 questions and different questions. So in making this
19 comment where I'm saying we need to be parallel with
20 humans and environment, I'm thinking we need to have human
21 toxicity and ecotoxicity and we need to have a separate
22 place. And it's kind of partly there, but not all the way
23 there and organized in that fashion. So I would suggest
24 you take a look at that as an approach. And that's where
25 I'm going to stop and make sure I made clear that

1 distinction.

2 The second one, I wish I had a good solution for
3 this. So I wanted to put it forth for discussion, and now
4 I'm going to undue it by talking about the alternative
5 assessment. But one of the places I get stuck in looking
6 at the process and how it works is how do we deal with
7 cumulative impacts. And I'm a watershed person, so this
8 is a very near and dear issue for me. Because whether the
9 watershed is the watershed of a sewage treatment plant or
10 the watershed of an urban creek or a larger California
11 watershed, they're really great integrators. And it's
12 common that a pollutant has a source that is not just one
13 manufacturer's product. But there's two kinds of cases
14 that occur. One is where multiple manufacturers use the
15 same ingredient and cumulatively they cause harm to an
16 aquatic ecosystem or cause noncompliance at a sewage plant
17 discharge.

18 The other and even harder one to get at is when
19 that ingredient occurs in multiple very different kinds of
20 products. And again I'll use the copper example. There
21 are numerous sources of copper into sewage treatment
22 plants, and it's the combined total of those that is
23 causing effluent to violate water quality standards for
24 sewage treatment plants.

25 What I'm not clear about is how one would

1 understand and identify through this process a usage that
2 might be individually small but cumulatively considerable.
3 And I don't know the answer and exactly how to suggest
4 that. The phrase I used is one out of CEQA, because CEQA
5 recognizes that we need to be thinking about that. I
6 don't think that it would be too burdensome to ask the
7 department to be integrating these things all together. I
8 think that's too hard. So I'm not sure where to go with
9 this. And that's a question for all of you to ponder on.

10 So should I move to the other -- okay.

11 CO-CHAIRPERSON GEISER: Make it brief though.

12 PANEL MEMBER MORAN: I will do my best.

13 So you all have in front of you, there's two
14 sheets. So Kathy sent out or distributed a sheet that's
15 also behind Bill.

16 And, Bill, I want to use a pointer and it's a
17 laser pointer and I don't want to zap you. Thank you.

18 So I just wanted to show -- is that better for
19 folks in the back? Thanks.

20 So you have this one that's the one up there.
21 And this is supposed to be a color key, although the
22 graphics program -- I drew this up for a group of us. And
23 my graphics program doesn't have exactly the same color
24 shadings as the larger group. But there is actually a
25 direct relationship between this chart and this chart.

1 And I'm presenting this on behalf -- three of us worked
2 most intensely on this, and that was Ken Geiser and Ann
3 Blake and myself. And Debbie was on the periphery of
4 this. And Mike Kirschner is not here, so I don't want to
5 totally blame him for this, but I did consult with him on
6 this, particularly on the first part.

7 What we were trying to do with this, and we had
8 several discussions and a lot of e-mail exchange in
9 putting this together, we were trying to say how can we
10 build on this discussion. We've had two discussions in
11 this group about the idea of tiered alternatives
12 assessment and how that might be a helpful concept
13 integrating that into the regulation. And we were also
14 thinking about three issues in this, at least I was.
15 Maybe I should just say I was. One is that a full out,
16 complete, very thorough alternatives assessment is
17 potentially very burdensome, and it didn't seem to us that
18 it was necessary to have a full outlook into everything
19 and every quantitative level for every situation and every
20 substitution, because some decisions are easy and some are
21 hard. So we were -- the tiering concept has been one
22 that's been very interesting to all of this group, because
23 it would allow the ability to match the level of effort to
24 the level of the problem as it were.

25 The second one is we were interested in seeing is

1 there a process that could reduce DTSC's management cost a
2 bit as well as the management cost to businesses.

3 And the third is there has been a lot of concern
4 about DTSC's ability to provide timely response actions,
5 particularly to problems that are either costly or really
6 harmful for California.

7 So those are three considerations that we were
8 working on. And maybe I'll just quickly -- I'm assuming
9 that everybody has had at least a brief chance to take a
10 look at the chart that was distributed a couple of days
11 ago. But there are three steps here. So at the point at
12 which the department comes up with the chemicals of
13 concern, there is a step there. At the point at which the
14 products are listed and the alternatives assessment, there
15 is a second step there. And then after that, there is a
16 new follow on step that's defined a little differently.

17 So the first step, at this point -- several of
18 you have mentioned that as soon as a chemical gets on the
19 list of chemical concern, a bunch of people are going to
20 go do something stupid. And that was -- Mike Kirschner
21 practically leapt out of his chair when we started talking
22 about this, which is why I have to credit Mike, even
23 though he's not here. And he said we really need to ask
24 people to at least think through that decision as soon as
25 that list comes out. And so the suggestion is that there

1 would be a very, very simple what we call Tier 1
2 alternatives assessment. And the idea of that would be
3 that it would be a very, very simple guidance and would
4 require only qualitative responses to a list of questions.

5 So the concept here is to make people at least
6 think when making that choice so when the list comes out
7 at the same time this list of questions and guidance comes
8 out so to at least encourage and perhaps require so we've
9 got this voluntary or mandatory question here, but to at
10 least provide all the tools so that people can avoid the
11 regrettable substitutions. And we should probably leave
12 to the discussion whether it be voluntary or mandatory.
13 I've heard so much concern about regrettable substitutions
14 I would tend towards the mandatory here, even though it
15 would be a very simple thing.

16 Then the department goes through its
17 prioritization process for products and comes out with its
18 products. At this point, the concept is to require an
19 alternatives assessment. With this tiered approach, we
20 put forth this idea that a standard alternatives
21 assessment would be based on a specific guidance
22 established by DTSC and would require a basic review of
23 the impacts. And it would use existing literature and
24 existing test results. So the idea is you take all of the
25 existing information. You do your first examination.

1 This is something you can do more easily and more quickly.

2 Now, we tend to focus in on -- this would be a
3 quantitative assessment, but it wouldn't be as hard as
4 some of the stuff we've been talking about. And I want to
5 put the caveat on this that most of us who work
6 professionally in this field, we tend to focus and jump
7 immediately to the hardest substitution problems. Many
8 problems aren't that hard. So this allows one to sort out
9 those problems that are easy from those problems that are
10 hard; those problems where we do have an answer with
11 existing information; and those problems for which more
12 information is needed. And also, where more information
13 is needed, allows the identification of what are the
14 things -- what more information do we need and where
15 should we focus additional work if we are trying to make a
16 hard decision instead of an easy decision.

17 So that goes to -- and then at that point, that
18 is submitted to the department. Because there is an
19 alternatives assessment, the department can require some
20 action so they actually can go ahead and the substitution
21 can occur or the department can require some sort of
22 interim mitigation while an additional more detailed
23 assessment is done. So this would be the focus follow-up
24 assessment. So that would be the most detailed tier. And
25 that wouldn't necessarily cover all of the issues. And

1 that way that could actually end up being iterative. But
2 the idea is we would be able to get action here. We would
3 not be overly burdensome on everyone. And there would
4 still be that opportunity to keep working harder on the
5 harder problems.

6 So Ken, Anne, do you want to add to that?

7 CO-CHAIRPERSON GEISER: Yeah, thank you, Kelly.
8 I think I'm going to move it along, because we have a lot
9 of people here. But I think the idea here was to give
10 some kind of grounding to the idea of a tiered process.
11 So as you comment, you might want to comment on this as
12 well.

13 I have Anne, George, Joe, Jae, Rich, Ann, Lauren
14 and Roger.

15 So, Anne, I think you're next.

16 PANEL MEMBER WALLIN: In terms of 6.A.1., I'm
17 struggling with what C&D really means. And so I would
18 encourage you to provide some further definition. Because
19 the way it reads right now is we have folks who are
20 certified by the State who do alternatives assessment, and
21 then we have two other choices. And it's not clear to me
22 how standardized those two C&D are relative to A and B.
23 And I would encourage along with Tim that we get folks to
24 do this in a relatively consistent way. So I don't see --
25 for example, a certified assessor employed by trade

1 association versus a certified trade association. It
2 doesn't really make a lot of sense to me.

3 Further down on that same page, this exemption of
4 small business I think is very troubling. I'm not sure
5 whether the assumption there is that it is simply too
6 burdensome for small businesses to be able to comply with
7 this or that the volumes of their product will be so
8 small. But it's not going to be a concern.

9 But what I fear is going to happen is some very
10 creative practices in terms of who puts products out that
11 might fall into the need for an alternatives assessment.
12 And I don't think that's the result that you want at all.
13 So I think you need to come back and come up with an
14 exemption that links back more toward your prioritization
15 process. And if their product really is so small to be an
16 inconsequential impact, that's what it should say. And
17 that really has nothing to do with how big the company is.

18 On 6.A.6., there's a reference to a third-party
19 alternatives assessment, and it's not at all clear to me
20 what the source of these are. So I don't know if what's
21 envisioned here is that people will just take it upon
22 themselves to do these and put them out there. I'm just
23 not really clear what function that serves in this overall
24 process.

25 And just a comment on the work that Kelly and the

1 group did. I think this is very intriguing, and I would
2 applaud again maybe a bit of a prioritization and
3 screening process here in this alternatives assessment
4 section to again get people focused on stuff that
5 ultimately is really going to make a difference. I worry
6 a lot about this getting spread out so wide and then
7 moving so slow that in 2020 we're still kind of waiting
8 for the first action here that gets its way through the
9 process.

10 I do have a little bit of a concern, and I'm
11 frankly a bit conflicted as to whether the place to put
12 the Tier 1 alternatives assessment is when a chemical of
13 concern is identified or leave it with the alternatives
14 assessment, which again presumably would get you focused
15 on products that make a difference, not necessarily every
16 product that has that substance in it. So I would urge
17 you to think about that as well.

18 Thank you.

19 CO-CHAIRPERSON GEISER: Good point, Anne. That's
20 great.

21 George.

22 PANEL MEMBER DASTON: I think that a lot of the
23 discussion is on the complexity of doing alternatives
24 assessment and I think that's absolutely right. I think
25 we need to acknowledge that, another reason to make this

1 process manageable.

2 A couple of points that I wanted to make. One is
3 the expertise requirements. The expertise requirements to
4 do this the right way is going to be significant. And
5 that begs the question of who is going to do it. And I've
6 heard some suggestions around the table. And one of the
7 ones that I want to make sure stays on the table is that
8 many companies are probably the best place to actually do
9 these alternatives assessments, rather than some sort of
10 third party.

11 I think of my own company where we have hundreds
12 of people on staff who are concerned with the various
13 aspects of safety of chemicals and thousands on staff
14 whose job it is to think about how products work and what
15 might be available and the universe of alternatives.
16 That's something that is very context specific and could
17 not be duplicated anywhere else. So I think that we need
18 to acknowledge that.

19 And of course, that does mean that industry is
20 doing it, but it also is something that I think we can
21 take care of through review processes. I think as long as
22 we have a process that is reviewable and to the extent
23 possible open, it will cover these kinds of concerns.

24 The second big issue of complexity that comes up
25 in the alternative assessment much more than in the method

1 by which we enter this whole alternative process is that
2 alternatives is multi-commissional and the various
3 commissions will have weights that differ based on some
4 objective and mostly subjective criteria. And I'm not
5 exactly sure how to get to the bottom of that, except by
6 some sort of an open process where people can compare the
7 apples and oranges and bananas that are going to come out
8 of that.

9 I mean, we've talked about brake pads and copper.
10 And, of course, the easy solution is to replace the copper
11 with asbestos. Well, that's not a great solution. I
12 think that would be going backwards. But you know, there
13 will be other considerations all the way from persistence,
14 to environmental health, to human health, to performance
15 of the product. I mean, perhaps the greatest risk from
16 brakes is when they don't work.

17 So you know, in terms of human morbidity and
18 mortality, so those are really complicated things. And I
19 think if you're going to weigh those and you probably want
20 to throw in things like sourced material and energy use
21 and manufacture and transport and all of that, all of
22 those things would have different weights. And I don't
23 know how to even put them into a common metric. So
24 there's going to have to be some sort of very transparent
25 way of putting those things out in a way that can be

1 evaluated and decided on. So I just want to put that out
2 there as something that needs to be addressed.

3 CO-CHAIRPERSON GEISER: Joe.

4 PANEL MEMBER GUTH: I want to suggest that the
5 alternative assessment and maybe the regulatory response
6 sections could and ought to have better definition of what
7 the purpose of that is. In other words, what is the
8 analysis supposed to lead to? I mean, if you look through
9 the alternatives assessment, there's a lot of things that
10 are supposed to be looked at, but not exactly what the
11 goal or the analysis ought to be. I think in -- let's
12 see. In the report, alternative assessment reports
13 mentions identification of selected alternative and
14 rationale but not really what the content of that
15 rationale would be and then in Section G, demonstration
16 that the selected alternative will have no significant
17 adverse impacts when compared with the current product.

18 So what I'm trying to get it is AB 1879 does
19 specify what the goal of the statute is, and I think that
20 ought to be incorporated into what the goal of the
21 alternatives assessment analysis is. And there are a
22 couple sections which I can identify, but basically it
23 says the goal of 1879 is to significantly reduce adverse
24 health and environmental impacts of chemicals used in
25 commerce as well as overall cost of these impacts to the

1 state society by encouraging the redesign of consumer
2 products, manufacturing processes, and the purchase. I
3 mean, that ought to be what the goal of the alternatives
4 assessments and the response actions is, is to further
5 those objectives.

6 I just want to make one other point, which is
7 basically about the problem of confidential business
8 information and trade secrets. I mean, I just think that
9 for companies that do choose to embark on doing
10 alternatives assessment, there are going to be huge
11 problems with this. I think that in order to protect the
12 information that is claimed as trade secret or CBI, the
13 alternatives assessments that are based on it are going to
14 be virtually impenetrable. I mean, to actually protect
15 the information, you have to protect it all the way. You
16 can't just let it leak out at the end of the day in the
17 summary report because you've lost the trade secret
18 protection. So I think that it's going to make these
19 documents very difficult to review either by other
20 companies or by the public or NGOs or by other public
21 health officials or by anybody.

22 So I mean, I hate to talk about worst-case
23 scenario, but I really worry about this process getting
24 driven into one that is really between individual
25 companies and DTSC trying to police it and monitoring it.

1 And nobody else is really going to be able to have any
2 meaningful input into the process. And if that's the way
3 it is, there's really not going to be any confidence in
4 the decisions that are made or the response actions that
5 are taken.

6 So I guess I would urge the department to -- we
7 have to adhere to the statute, and there are some
8 statutory standards. But what can be a trade secret?
9 Like, there's some judgment that needs to be made.
10 There's some interpretation that needs to be made. So I
11 would urge the department to take as a policy decision if
12 it believes transparency is important to make this all
13 work as aggressive a rational interpretation of statutes
14 as possible to get as much information as is rational
15 under the statute out into the public domain.

16 And then I guess that ties into this just one
17 last thing I'll say. This is good the NGO community is so
18 concerned about the certification. Who's going to do
19 these? Is the industry going to do these themselves?
20 They're very concerned about the lack of transparency.
21 And so I would urge as much actual review as possible and
22 have the department take on as a formal matter some kind
23 of review of these determinations itself and not rely just
24 solely on the certifications.

25 CO-CHAIRPERSON GEISER: Thanks, Joe.

1 Jae.

2 PANEL MEMBER CHOI: I guess Joe covered what I
3 want to say, so thank you.

4 I was thinking about this as a company owner or
5 for approval of this AA material. It really doesn't have
6 any, as Joe said, goal and purpose and also the
7 consequence that I'm going to face.

8 For example, if I have this B.6.E., economic
9 impacts, if I'm owner of -- business owner, this is going
10 to be really negative. It's negative for me to my own
11 business to find the alternative assessment -- alternative
12 materials. So in that case, what is DTSC going to tell
13 me? Is it approve my proposal or disapprove? So I'm
14 really confused on that.

15 So it's sure to have some -- okay. It requires
16 but I think it should say something like -- I don't
17 know -- design of chemicals and the process, instead, ban
18 or remove hazardous or toxic chemicals from my product.
19 Okay. Something like that.

20 And then also the consequence. It says "or
21 require" -- the require, the require. But -- okay. I put
22 it in all these requirements in my proposal, and then what
23 are you looking for? So it's really confusing.

24 And then Tim I guess mentioned about the
25 standardization. Somehow if we want to keep this format

1 or requirements, we have to have a standard form or
2 something. So as a business owner, it makes me much
3 clearer why I do this.

4 CO-CHAIRPERSON GEISER: Rich.

5 PANEL MEMBER LIROFF: A few small comments.
6 Bottom of page 12, last line actually the reference is, 6
7 B.5.A.3. So it's easier to see the last line on page 12.
8 There is a reference here to packaging, and packaging is
9 important. But I just wonder whether the whole dynamic of
10 considering alternatives to products in commerce is
11 acceptable from the packaging issue. And packaging is
12 postconsumer use. It's biodegradable, compostable.
13 Somehow the issues related to packaging are not central I
14 think. They're important. It's really not central to the
15 fundamental issues that I think the alternatives analysis
16 is intended to look at.

17 So my instinct would be if we are trying to
18 simplify, just get rid of the packaging consideration. It
19 will sort of play itself out -- that will play out by
20 itself.

21 The other thing is two other comments. You know,
22 Maziar said we don't have -- in essence, we don't have any
23 precedent for writing regs like this. And in essence,
24 that's true. But there is experience that bears on this.
25 So I find myself wondering, sort of inviting contributions

1 from Ken and Lauren on this. What, in fact, was learned
2 from the Massachusetts process, from the ten chemicals
3 that were looked at? That might be instructive here.
4 What lessons might have been learned from the application
5 of the green screen to look at flame retardants in
6 television sets? You were involved with that, Lauren.
7 Are there lessons from those experiences that could be
8 shared?

9 And maybe to Bill's point about how companies
10 might respond with the instant drop-ins, because they want
11 to deduct the obligations. There's fairly recent the
12 application of Wal-Mart Green Works system to consumer
13 products. I'm just wondering if lessons are beginning to
14 surface in terms of providers of products to Wal-Mart
15 having looked at this and Wal-Mart Green Works. And have
16 they figured out here's how we're going to lower our
17 scores, get rid of our regular chemicals, compete more
18 effectively on toxicity.

19 So I'd simply encourage DTSC staff to talk to the
20 Wal-Mart folks or the Works folks and see, okay, what kind
21 of behavior in reality in specific segments is beginning
22 to surface as a result of Wal-Mart's system? What can be
23 learned from those experiences that might be applicable to
24 these regulations?

25 And my third and last point is I want to lower

1 the bidding on the number of chemicals that are named.
2 Dele suggested simplifying by starting with 25. I'd like
3 to bring it down to ten. Let's understand what this game
4 is about.

5 There was an analogy made to the National
6 Environmental Policy Act in 1970. I actually wrote my
7 doctoral dissertation on NEPA. Because when I was in
8 graduate school, I read the statute and I scratched my
9 head and wondered, did Congress really understand what it
10 was getting itself into? And that's what my dissertation
11 was about. What was the intent? I talked to the people
12 who wrote it, the staff. They fully appreciated how this
13 would play out. And I looked at the early litigation.

14 Alternatives assessment, this California program,
15 I think is exactly like NEPA in the sense it's a
16 fundamental game changer about how we make decisions. We
17 know what EIAs did in terms of being game changers.
18 Alternatives assessment is the same thing. There's an
19 awful lot at stake here in making sure the California
20 program succeeds. And I think we need to narrow it down
21 to being manageable. And yet it's going to be maybe even
22 that much more gaming around 10 chemicals rather than 25.
23 Maybe the stakes will be higher.

24 But I think we need to make sure, and this
25 proposal here I think is an effort that reflects that. We

1 need to make sure that out of the gate California comes up
2 with something that's manageable and scaleable, reflects
3 the reality that there certainly aren't a lot of
4 government resources here. Because at the end of the day,
5 we need to make sure this thing works.

6 So I'm just going to stop there. Thank you.

7 CO-CHAIRPERSON GEISER: Okay. Here's where we
8 are. I think we have Bruce, Ann, Lauren, Roger. And then
9 it's all the new people. And then I think Tim is up as
10 well. I think I'll put myself in there and then we'll
11 start on people who've spoken already. So is it Bruce or
12 Ann was first? I think Bruce.

13 PANEL MEMBER CORDS: I'm going between Richard
14 and Dale, suggest 15.

15 No, I think this goes back to what Bill said
16 early on, and that is I'm sitting here thinking I think I
17 know a way to beat the system. And that is when the list
18 of 25 or 15 or whatever comes out and I've got a product
19 in there, say I'm a small manufacturer, I basically delete
20 the product from my product line, come out with put
21 something else in to replace it, come out with -- a new
22 package, new name, new marketing literature, and I don't
23 have to do any of the alternative assessment. That's my
24 concern.

25 Now, you accomplished the goal of getting rid of

1 one of the bad 25, but you didn't have any control over
2 what replaced it. And I think you're right; when the
3 first 25 come out, people are going to start finding
4 alternatives right away and they're not necessarily going
5 to go through that kind of detailed assessment.

6 And I worry about, Kelly, the trade-off of the
7 CMR for something with high fish toxicity.

8 So that's it. Thank you.

9 PANEL MEMBER BLAKE: I've been sitting here
10 struggling. I think I'm going to echo and tie together
11 some themes that I've been hearing and absolutely share.
12 And the struggle I'm hearing, which we struggled and now
13 we're getting down to the nitty-gritty on, is we're
14 struggling between this balance of getting something done
15 sooner that has an impact, but also not -- what I'm seeing
16 also is not tying DTSC's hands down the road. So if we
17 area putting in something very specific like we start with
18 only X CRM whatever, aquatic toxicity or ecotox, how do we
19 balance those two things.

20 So I've been sitting here thinking about how we
21 move forward. And if I'm in DTSC's shoes, how we do this
22 in a practical way. And that's partly why we start this
23 alternative assessment. And it is inherently another
24 level of prioritization. We're starting to do an initial
25 screen in saying what are the things and starting to sort

1 through what's an easy problem? What's a hard problem?

2 What are we going to need more data on?

3 So this tying I think to something that Tim
4 hinted at earlier this morning also is that we need maybe
5 to start modeling scenarios of how this moves forward and
6 some work from something that Dale indicated and several
7 people have echoed, which is work from the outcome. What
8 was our goal behind this? Let's pick the things that we
9 know are impacting California's environment and public
10 health right now.

11 The 25, 15, I'm not going to even enter the
12 bidding process here. Twenty-five feels about right to
13 me, Dale also, the ones that we know are obvious ones.

14 And I think that touches on public comments about
15 things that we know are bad actors and are well-studied
16 bad actors. How do we go about dealing with those? How
17 do we pull all of that together?

18 So if we can work from both ends of this, start
19 screening through the things that we think we can tackle
20 through this tiered process. What are products that are
21 likely to impact the environment and public health? And
22 what are the outcomes that we are seeing that we want a
23 direct impact on that we already see in the environment;
24 copper and aquatic toxicity, triclosan, one of my
25 favorites. I know it's a pesticide and exempt from here,

1 but throw it in here when I can. So if we can think about
2 working from both of those ends.

3 And I'm a practically-minded person. I have to
4 envision that also in order to see what kinds -- and start
5 thinking about what the principles are upon which you
6 would be making decisions and making these trade-offs. We
7 are going to have to make decisions about trade-offs at
8 some point. And we keep kind of dodging around it, but we
9 are going to have to do that at some point. So start
10 thinking of DTSC and all of us as stakeholders. What are
11 those weighting factors that we're going to be putting in?
12 And what are those things? And they're going to be
13 different for different impacts. You're going to have
14 some impacts that will have a huge hot spot, as Meg says,
15 and maybe we can tackle that in a different way.

16 It's really hard for me to grapple getting
17 something done sooner with this huge mass of chemicals.
18 How do we even start parsing this process? I think we
19 start with outcome. We start with things that we know are
20 having an impact right now. And then we start rating this
21 process, start running some of these case studies through
22 and see whether their ability comes in, where the
23 decisions come and where the weights shift in terms of
24 decision making. We just have to start making those
25 decisions.

1 And I cannot emphasize more strongly that we need
2 to make that as transparent as possible. We have an
3 additional experience with Good Gug (phonetic), the
4 struggle with that we've taken publicly available data and
5 making some judgments and rolling it up into -- you know,
6 a measure of greenness which is how the end consumer takes
7 it, no matter how many caveats you put on it. But we're
8 making that judgment and trade-off and to make that as
9 transparent as possible so people can make their own
10 decisions at a consumer level. But when we're making
11 collective social decisions about whether copper brake
12 pads should be substituted with asbestos or something
13 else, that needs to be transparent with as many voices in
14 the room as possible.

15 CO-CHAIRPERSON GEISER: Lauren.

16 PANEL MEMBER HEINE: I'm hearing this common
17 thread of the need for kind of a top-down prioritization
18 or principle. And sometimes I wonder why can't California
19 sort of identify the impacts of greatest concern to
20 California and then address them through this process.
21 And I know there's reasons for it.

22 But I also look to Denmark and Finland and some
23 of the European countries that have done just that. We
24 have done assessments of chemicals and materials of
25 concern within their nation. And California is bigger

1 than that. So I can understand that. And whether that
2 comes through a public process or through a life cycle
3 assessment that occurs at the state level, I think there
4 is a need for sort of a winnowing down.

5 And secondly, I would like to say that I
6 understand this can be obviously very problematic, and I
7 don't understand why we cannot add to chemicals under
8 consideration a set of characteristics. So you're using a
9 set of characteristics to define chemicals under
10 consideration. And then you put those chemicals on a list
11 and then you take the characteristics away. That doesn't
12 make sense to me. Why wouldn't you just say here are
13 these chemicals or chemicals that have the following
14 characteristics? And they could be CRMs and PVTs, for
15 example, and then that would at least start to get at some
16 of the shifting from the listed chemicals to chemicals
17 with equivalent concern. That's certainly what REACH did.
18 They just defined by characteristics, not necessarily --
19 well, both characteristic and the chemicals themselves.
20 And you might even make it a little broader than CMR,
21 PVTs, because there are a lot of chemicals we don't want
22 to miss.

23 And finally, I have a sort of odd idea. Knowing
24 that the State doesn't have a lot of money, I'm
25 envisioning just how incredibly valuable alternatives

1 assessment is from the educational perspective. And what
2 about some sort of university challenge, you know, where
3 you give Davis an engineered product, an electronic, and
4 you give Stanford or Berkeley a cleaning product and you
5 give somebody else a toy and you give something else and
6 say do alternatives on these and do a competition. And
7 then the prize would be a day in Maziar's seat at DTSC.
8 You get to have lunch with him. You get to sit in his
9 chair. You get to write regs for the day.

10 I don't know what you do all day, but I know
11 you're very busy.

12 Maybe they get a little bit of money. I don't
13 know. You could ride in a limo with Maziar. You could go
14 meet the Governor every day as he does -- no. So some
15 sort of -- we're all anxious to get started.

16 What about a university challenge? Because this
17 is going to be a hugely valuable education experience.
18 And I was envisioning who is going to do the generic
19 alternatives assessments. These companies are going to be
20 doing proprietary alternative assessment. Who's going to
21 be doing the generic ones? Well, it's probably going to
22 be the academics or like the Lowell Centers of the world
23 who are asking questions are there alternatives. Those
24 are beautiful educational experiences and they're going to
25 produce public documents. So I don't want to forget those

1 other principle Green Chemistry Initiative things. And
2 those are tied to the education.

3 And I wanted to just address quickly Rich's
4 comments about lessons learned from application of the
5 green screen. And Hewlett-Packard has adopted that pretty
6 much whole hog. And what they've done is ask their
7 suppliers when they're replacing the chemical of concern,
8 they need them to do a full hazard assessment on the
9 alternatives before they turn around to sell to HP.
10 That's huge. So they decided that it's so expensive to
11 get a chemical of concern out of their supply chain. They
12 don't want to replace a restricted chemical of concern
13 with an unrestricted chemical of concern, because there is
14 a good chance that will get regulated down the road, too.
15 So they're trying to move to truly safer alternatives.
16 And just somehow whether you do that by defining
17 characteristics under chemicals of concern, that's I think
18 where we want people to go. It doesn't have to be a shift
19 from a listed to an unlisted chemical.

20 CO-CHAIRPERSON GEISER: Thank you.

21 Roger.

22 PANEL MEMBER MC FADDEN: Thank you, Ken.

23 Roger McFadden, Staples.

24 I wanted to address -- George, you mentioned
25 complexity, and I would agree there is a lot of complexity

1 to an alternatives assessment. There's another word that
2 starts with C that I think is important here, too. It's
3 called credibility, because the data that we collect and
4 we have to give to our world needs to be credible. So in
5 the business world where -- by the way, I'm a scientist
6 who has to practice within business, which can sometimes
7 be challenging, I must say. But never the less, that's
8 where I have chose to be.

9 We have, in business, audited and unaudited
10 financial information. For instance, we do our own -- we
11 have great CPAs in our company, like many of you do. They
12 do great work. And they follow principles. They follow
13 all the standards. It strikes me, though, that there's
14 certain places where even their data submitted to
15 financial institutions, maybe even to stockholders, won't
16 really be all that accepted unless it's audited.

17 So I would think that even though we may have
18 folks in our organizations that are very competent without
19 a doubt, we have maybe many of them, I don't think we want
20 to forgot that other parts of our business are used to
21 auditing on a regular basis.

22 Definition of small business. At the same time
23 that I can understand and respect the small business
24 exemption idea, keep in mind that many large businesses
25 have lines of businesses within them that are quite small.

1 So may be a very large corporation may have some lines of
2 businesses that are start-ups or small businesses. They
3 have their own budgets. They may not have the amount of
4 money necessary to do these types of activities. So keep
5 that in mind as you go forward.

6 And then lastly, I'm going to tiptoe into Tim's
7 world, the legal world for just a moment. And I want to
8 challenge all of us for a moment that though we may think
9 as scientists that collecting this kind of data and then
10 communicating it in a more formal format like this to the
11 State is a good thing to do, there are legal people within
12 our companies who are going to raise issues about what we
13 say.

14 So I want to call your attention to 6.E.2.g.
15 where it says, "Demonstrate that the alternatives have no
16 significant adverse impacts on public health or the
17 environment." If I were to take that to our legal team
18 and say -- vet that to them and say we want to make that
19 claim in our report, they would probably have some real
20 problems with that, because they would want us to be able
21 to defend that if anyone ever challenged it.

22 Also Section E.2.i., as much as I support the
23 twelve principles of green chemistry, and I do and many of
24 you and my colleagues here know that as much as I support
25 those, that's problematic in companies, because that's

1 taking a position on something that corporations may not
2 be comfortable taking a position on.

3 So I just raise these issues not to cut
4 underneath it or somehow challenge it, but simply to throw
5 it out there that if you want this to work, it's got to
6 work within the business world. And that means we have to
7 respect the way business is done. And so if you want
8 alternatives assessment to be done, probably don't want
9 those stated exactly that way. Thank you.

10 CO-CHAIRPERSON GEISER: Mike and then Art. And
11 then I will say something.

12 PANEL MEMBER WILSON: Thank you.

13 Mike Wilson at U.C. Berkeley.

14 And it seems to me that the three overarching
15 sort of goals of the alternatives assessment process are
16 to steadily move the market toward the use of safer
17 materials, safer chemicals, and products to avoid the
18 regrettable substitution and to begin motivating companies
19 to implement and integrate this idea at the early stage of
20 design. Sort of getting to the comment that was made from
21 e-mail earlier on from the chemical engineer that once
22 these products are out into the market and so forth, it's
23 very difficult to retool.

24 And so I have just a couple of thoughts about
25 that. One is that it seems to me that allowing both

1 in-house and third-party alternatives assessment makes
2 sense as long as there is as much transparency as we can
3 possibly instill into that process; public disclosure with
4 a standard set of metrics; that we have a disciplined way
5 of dealing with the data gaps; and that, as Roger says,
6 the outcome is credible and auditable.

7 And I think one of the advantages -- and George
8 was getting to this -- around doing in-house assessments
9 is that it develops the capacity of companies to do this
10 in the design phase and design products as they're coming
11 on to the market with these ideas in place.

12 On the small business side, I would -- it's sort
13 of related to this. I would urge DTSC to think carefully
14 about exempting small businesses, that notwithstanding the
15 problems here of developing alternatives assessment, it
16 seems to me there would be ways for small businesses,
17 small and medium size enterprises, if you will, to come
18 together in consortia of various kinds to do this work.
19 So I think -- I want to flag it for further discussion. I
20 also understand the problem that this could be overly
21 burdensome. I want to just continue the conversation
22 there.

23 And the third is around this question of whether
24 we narrow the scope to 10, 15, or 25 substances, I want to
25 push back on that, recognizing that when Massachusetts

1 implemented its Toxic Use Reduction Act, it did so with
2 600-something substances on the TRI list. It put in place
3 toxic use reduction planners, sort of similar to what
4 we're doing here. They found that chemical management in
5 firms across the state was fairly undisciplined and simply
6 that process of requiring companies to go into their
7 process and look at what they were using and so forth had
8 large benefits, 40 to 75 percent reduction in many of the
9 TRI listed substances over the course of ten years or so,
10 and even when the implementation of the pollution
11 prevention plans was voluntary in the end.

12 And so it may be that as this information in the
13 information submission process is coming in, we may be
14 dealing with a situation with thousands of substances of
15 concern and that I would warn against circumscribing our
16 scope to the initial 25, recognizing the need to do a test
17 case.

18 EPA found in reporting to the GIO in 1998 they
19 were concerned with 14,000 chemicals that are in
20 commercial use on the basis of their volume in commerce
21 and their structure. And, you know, essentially the
22 jigsaw puzzle is still taken apart. It's in the box. And
23 we have a process here where we're dumping all the pieces
24 out and putting them on the table.

25 And so that leads to my final point, which is

1 that I think the tiering of Tier 1 and Tier 2 makes sense.
2 I think there will probably be, given the lack of
3 information and how backlogged we are in this arena, that
4 there may very well be substances for a fairly simple
5 alternatives assessment could be conducted that would deal
6 with some immediate bad actors, if you will. And the
7 immediate chemicals of concern we know we need to move out
8 of commerce quickly. And again, I think this gets to a
9 point raised by the representative from change as a
10 mechanism to address sort of taking more prompt action on
11 obvious chemicals of concern.

12 So I guess I support this approach of a Tier 1
13 and Tier 2 and would urge that we sort of flesh it out a
14 little bit along the way. Thank you.

15 CO-CHAIRPERSON GEISER: Art.

16 PANEL MEMBER FONG: Thank you, Ken.

17 Since I'm sitting next to Rich, I feel obligated
18 to continue the discussion on lessons learned.

19 One of the lessons that we learned in the EPA
20 environment flame retardant alternatives for circuit board
21 projects that's been ongoing for -- Lauren, three, four
22 years now? Four years now for fairly complicated products
23 it probably could not have been done by a neutral third
24 party. So some of the problems that we came across was
25 that there were somewhere between 25 to 40 participants

1 from industry in this particular EPA project. And some of
2 the companies are fairly large influential companies, such
3 as Intel, IBM, and Hewlett-Packard. And even we do not
4 come up with the data set that's necessary to do a
5 comprehensive alternative assessment. So I think that's
6 important to keep in mind.

7 So this goes back to George's point about doing
8 things in-house. One of the things that we noticed when
9 we were doing this going through this process is that when
10 you have industry input into alternative assessments,
11 especially when it's done in-house, that really drives
12 innovation -- seems to drive innovation much more than
13 having it done by a neutral third party. The reason,
14 besides the facts that George pointed out about the
15 resources and the people -- actually, thousands of people
16 actually thinking about these problems is that in-house we
17 understand what the business objectives of what we're
18 trying to do is. And because of that, we drive to
19 innovate. And that would be something that's much more
20 difficult to do when the alternative assessment is being
21 done by a neutral third party. And I think innovation in
22 a green economy is also a very important component to what
23 we're trying to do.

24 Thank you very much for the time, Chair.

25 CO-CHAIRPERSON GEISER: Well, seeing I've been

1 baited here, I will talk a little just momentarily about
2 the Toxic Use Reduction Program, because it is 20 years
3 ago -- actually 21 years ago now that we negotiated this
4 law in Massachusetts. And we were up against some of the
5 same things that I think we're up against on this issue
6 here, not on all the issues that this law sets up, but
7 this one, which is how do you empower and move industry to
8 move towards safer, in this case, chemicals in production?
9 Not in products, but in production. And at the same time
10 protect confidentiality and deal with a state that didn't
11 have a lot of money and all the things that are very
12 similar.

13 The program, many of you know it. But very
14 briefly, the program requires that firms produce a plan on
15 how they would reduce the use or reduce or eliminate,
16 Mike's right, 600-some-odd chemicals in the production
17 system. And that plan had an alternatives assessment as
18 part of that. So that part is a parallel to what we're
19 doing here. It was a structured process. The law and the
20 regulations very much very clearly said what in this case
21 an alternatives assessment as a part of it the plan really
22 had to entail.

23 And now the things that are interesting about it
24 is we left two options: Either firms could do it
25 in-house, or firms could do it by hiring a consultant, by

1 hiring a person to do it outside. And we recognize -- and
2 this goes to Art's point, we were always trying to build
3 capacity. That's what we saw ourselves doing. And so in
4 the larger firms, of course they use their own planners in
5 this case to do the work in-house, which of course did
6 have a benefit of improving innovation inside the firm, et
7 cetera. But that's not true for a lot of mid-size firms
8 that simply didn't have that capacity.

9 So it turned out the external planner in this
10 case actually produced the innovation that could then be
11 adopted, because the external planner often was visiting
12 other firms and had a capacity to be able to say, "Well,
13 have you tried this? Have you thought about this? What
14 about this?" And became a kind of an agent of change in
15 helping firms to adapt to the lower toxicity kind of
16 production system.

17 Now, we excluded small business, because we
18 didn't think that small business could handle this. We
19 later came back and worked out a process of very, very
20 simple checklist kind of process for small businesses,
21 because we realize small businesses really were important
22 and they did handle a lot of heavy toxic chemicals in
23 Massachusetts. So we didn't want to exclude them. But we
24 realized they couldn't do the big plans. So we ended up
25 with this results program where we worked with groups of

1 small businesses to try to get them to do what the others
2 could do as well.

3 Now, Mike sort of indicated that maybe we started
4 with 600 chemicals. We did start with 600 chemicals. But
5 one thing we did do is created a delay of four years
6 before implementation kicked in. And during that
7 four-year period, we piloted a lot with chemicals. So we
8 got to learn a bit how to do it before we actually had the
9 firms try to really do it in a formal way. So that's one
10 of the reasons why I keep pushing, kind of phasing and
11 staging and things like that and why I'm attracted to
12 Dale's 25 or 15 or whatever it is chemicals that I think
13 starting small proved to be a real benefit to us.

14 Now, people know the numbers typically that we
15 reduce toxic use reduction 40 percent. But there's other
16 data that we don't normally talk about because it's not
17 relevant, but it is here. And that is where we do
18 attitudinal surveys of firms in Massachusetts. What did
19 you get out of doing a Toxic Use Reduction Plan? What did
20 you get as a benefit out of doing a Toxics Use Reduction
21 Plan which had an alternatives assessment in it? Eighty
22 percent of the firms said they found the actual doing of
23 the plan useful. And over 70 percent actually adopted or
24 changed production in some way because of the plan that
25 they did.

1 Now, if you'd asked those firms in the beginning:
2 Is this going to be useful to you? Believe me, five
3 percent probably would have said that. But the fact that
4 there was a process -- what happened inside the firms was
5 zealots or champions or people who had no power to do
6 things became empowered to move the firm forward in a way
7 that changed the way that firm thought about the
8 environment. So that was a pretty important kind of
9 building of capacity of the health, environment, safety
10 people inside the firms.

11 Now, the one thing that we did do and I'm always
12 cautious about with regards to the program we've got on
13 the table here is the plans were not public. The plans
14 were confidential. The only thing the public ever got to
15 see was a summary of the plans, a very brief little page
16 and a half summary of the plans.

17 Now, that's 20 years ago. Twenty years ago, this
18 kind of radical transparency that we're all chattering
19 about these days, it wasn't so lively. Today, I think
20 transparency is a much bigger issue for us than what was
21 in that period. So I'm a little reluctant on the
22 Massachusetts model on that issue, because we didn't
23 require -- by allowing the plans to be confidential, what
24 the firms that negotiated the law with us said, "If you
25 let the plans be confidential, we'll do the best plans we

1 can, because we're not going to put time and effort into
2 this if it doesn't make a lot of sense to us. And we will
3 do a good plan. But if you make us make it public, we're
4 going to do really cheap very, very cursory kinds of plans
5 because we don't want our competitors to know what we're
6 doing and stuff like that."

7 So this transparency thing is the thing I think
8 I'm sort of hesitant on in thinking that the Massachusetts
9 model is so directly modeled for the California
10 experience. But I do think that that's the reason I'm
11 sort of falling back to this tiered approach as a better
12 way to do it, to suggest that there are simple processes
13 that alternatives assessment can be done that are not
14 cumbersome but will have surprising results for firms
15 because they will find that it is in many cases fairly
16 easy to re-think the product or whatever.

17 Firms think it's very hard when they start. But
18 once they start doing it, they find it's a lot easier.
19 That's been our experience. But we need to be able to
20 ratchet it up for the more complicated alternatives
21 assessment where there are really big time issues on the
22 table, like restricting the chemical or phasing out the
23 chemical. In that case, we have to be very certain that
24 we are doing a full analysis of some kind to make sure
25 we're not in a regrettable situation at the end.

1 So that's why I think Kelly and Ann and I were
2 sort of pushing something tiered. I don't know that
3 that's exactly the right model, but the idea of a tiered
4 system that allows firms to sort of work themselves up
5 depending on what level of sophistication they have and
6 also what level of concern there is for the chemical or
7 the product of concern. So just some ideas from our
8 experience.

9 I don't see any cards from anybody who hasn't
10 spoken at this -- nope. Bob.

11 PANEL MEMBER PEOPLES: Am I jumping the gun here?

12 CO-CHAIRPERSON GEISER: Did you --

13 PANEL MEMBER PEOPLES: No, I didn't.

14 CO-CHAIRPERSON GEISER: I was going to suggest we
15 have Bob speak, and then I will go into the order of the
16 people who have already.

17 PANEL MEMBER PEOPLES: Thank you, Chair.

18 Well, first of all, I'm going to speak to a
19 dimension of this challenge which isn't associated with
20 the technical and logistical issues we're talking about,
21 but it speaks to the credibility issue that you brought up
22 in your opening remarks. And you know, there is an old
23 saying that is perception is reality. So you've got to
24 work hard on a simple word that's really difficult to
25 implement and that's communication. So I think when

1 you're trying to influence perceptions, it's really
2 important that, you know, you dedicate effort to
3 effectively communicating. And sort of a corollary to
4 that is it would be a lot better if the public that you're
5 trying to -- oh, sorry. It would be a lot better that
6 you're trying to convince that you are being open,
7 transparent, and honest about this if they hear it from
8 you first by whatever mechanism as opposed to hearing
9 it -- picking it up off the website, on somebody's blog,
10 or in some newspaper somewhere.

11 The second thing is I think it's really important
12 to celebrate early successes. Hey, we are making
13 progress. Oh, look at this. They're not just sitting in
14 a room talking about it. There's good things coming out
15 of this. And I think that's called quick wins.

16 But the other thing is we talked about the issue
17 of existing products and chemicals versus new stuff to the
18 marketplace. And to the extent you can have some examples
19 of new materials that the marketplace that resolve issues
20 and avoid the creation of unintended consequences is
21 another story to tell that people can look at and say,
22 "Wow, not only are they doing this, they're sharing the
23 information, but it's working. We're having a positive
24 impact." So you start to build some momentum. So
25 obviously it takes time. It's not going to happen

1 overnight. But we also know this is a journey. You look
2 back five years from now, we'll be really surprised how
3 far you can come if we just keep at it, even picking up
4 the small increments.

5 CO-CHAIRPERSON GEISER: Thank you, Bob.

6 All right. So I think now on our second round
7 we've got about 12 minutes or something like that. So can
8 I ask people to be short and make their point really well?
9 And I have Tim and Megan and Dale and Debbie are the ones
10 that I see, and Kelly. So please be short in respect for
11 time.

12 PANEL MEMBER MORAN: I just wanted to make one
13 quick clarification on the little chart in the back so I
14 don't beam Bill here.

15 One of the ideas here was not to reduce the
16 burden on the department as well. So a concept was to not
17 require a work plan and a work plan review for this Tier 2
18 A, because there would be a guidance and it would be more
19 straightforward. So work plans would only have to be
20 reviewed if there was a need for a more detailed
21 assessment of specific things. So that reduces the burden
22 on industry. They don't have to reduce two documents,
23 only one. And it reduces the burden and time barrier for
24 the department by not requiring that work plan submittal.

25 CO-CHAIRPERSON GEISER: Tim.

1 PANEL MEMBER MALLOY: Thank you.

2 Just a couple of points responding to some things
3 that I heard. The first one is what I view as a
4 discussion between transparency versus more either
5 narrative or quantified standards. And I think, George,
6 you made this point that you can't really have very set
7 standards. So transparency is really the thing that is
8 the trade-off there. And I just have to say I'm
9 supportive of transparency. I support Joe's points about
10 CBI and whatnot.

11 But along the theme of lessons learned, I think
12 we have to recognize transparency is a bit overrated in
13 terms of kind of ensuring quality behavior in the
14 regulated entity. And here's the lesson learned. Title 5
15 permitting under the Clean Air Act, the idea was, look,
16 this is major source permitting under the Clean Air Act.
17 There will be one place where people can go and see all
18 the air standards that apply to a major facility. And
19 that way there's a lot of transparency. And the public
20 can come in and NGOs can come in and so forth. But what
21 you found happening actually was that there was
22 information overload. There are so many facilities and so
23 many Title 5 permits and they're so complicated that a lot
24 of the folks in the public and many NGOs just didn't have
25 the capacity to deal with all the individual facilities.

1 And I think the same thing is likely to happen
2 here, that you can have all the transparency you want, but
3 the watchdog effect I think is going to be lacking because
4 there's going to be too many things to look at and too few
5 watchdogs around. And that's where I think you really
6 need to have some enforceable standards that are norms for
7 the business, but also are clear for the agencies and what
8 they wanted to do.

9 The other lesson learned I wanted to point out
10 here is I look at this and I see this as a permitting
11 program essentially. You don't call it a permit. But
12 look, there is a call in for information. There is work
13 plans. They're analyzing their processes and products.
14 And then as a result of that, they're coming up with a
15 regulatory alternative that's going to regulate behavior.
16 This is a facility, really a product-based permitting
17 program. And one of the things you learn from permitting
18 programs is these tiered things do tend to work.

19 So I think of your tiered thing as more like a
20 general permit versus a facility specific permit. That's
21 probably not directly on point. But I think it makes a
22 lot of sense. The devil is in the details. So when you
23 say where there is a clearly preferable alternative, like,
24 what does that mean?

25 So I think that's going to require a fairly

1 detailed guidance which would identify specific scenarios
2 in which people would fit in and then could plug
3 themselves into it. So I support that, but I think there
4 is going to be a fair amount of work involved in getting
5 there.

6 And the last thing I wanted to say is I think we
7 have to be -- or DTSC has to be realistic about what can
8 be done and have a workable program. So having said I
9 like standards, I'll back up a little bit and say, well,
10 but we can't be too rigid in the sense of there is a
11 difference between life cycle analysis and life cycle
12 thinking. So I think we have to think in terms of you
13 can't -- what is that phrase? You can't let the perfect
14 get in the way of the good. I don't know what it is.

15 But anyway, you get my point, which I think goes
16 a little bit to Rich's point, which is you do the best you
17 can on some of these criteria, but some criteria are going
18 to obviously be more -- there's going to be more data
19 available people are focused on and they're more directly
20 impacting the businesses as opposed to things that are two
21 or three steps back, like I don't want to say because I'll
22 get somebody mad at me.

23 But the idea -- I think there has to be a balance
24 in terms of sometimes you're going to have to accept the
25 rough cut, the qualitative in order to get something

1 finished in a reasonable amount of time. And that's the
2 trick. But I think that's why I think there needs to be
3 so much attention paid to the trade-offs that are being
4 made and the values, because we want standardization to
5 the extent where these are criteria that are really
6 driving the decision. And with respect to ones that
7 aren't so central, then you need less standardization and
8 you need more of a narrative qualitative effect.

9 Thank you for the time.

10 CO-CHAIRPERSON GEISER: Thank you, Tim.

11 Of course, we're all interested in what you just
12 censored yourself on.

13 PANEL MEMBER SCHWURZMAN: Thanks.

14 One comment, just because I commented before,
15 before Kelly discussed this tiered approach. I just want
16 to sort of go on the record in support of this kind of
17 thing. Everybody knows it needs to be fleshed out a
18 little bit more. But the idea that some guideline for a
19 Tier 1 alternatives assessment would come out at the same
20 time as the chemicals of concern list or the prioritized
21 consumer product with chemicals of concern in them list
22 seems very important and providing the opportunity for
23 this step-wise approach. So I just want to support that
24 in general.

25 And then my second comment sort of gets back to

1 the issue of who performs these analyses. And what I'm
2 hearing and I think I'm in favor of is keeping a lot of
3 options on the table in terms of who performs. And I
4 respect the notion that there is, particularly in the
5 larger companies, significant internal expertise and that
6 we do need to be cultivating that capacity for up-front
7 design of safer substances and getting buy-in within the
8 company's own designing and engineering and product
9 formulation parts.

10 I think it would be a real mistake to limit it to
11 that though. And I can't believe it didn't occur to us
12 before, before it occurred to Lauren to suggest using the
13 universities. But I think it's a great idea, particularly
14 what my experience is. And I think a couple other people
15 in the room could speak to this of getting some talented
16 students, whether undergraduate or graduate level
17 depending on the question at hand. Working on a problem
18 brings in a creative approach. It's the immediate way to
19 get an interdisciplinary approach and has the benefit of I
20 think what we see happen in the pharmaceutical industry is
21 the lack of R&D around potentially non-hugely profitable
22 solutions. So where someone doesn't have an investment in
23 something they could patent for a use, it doesn't get
24 investigated. So if you take a problem-solving group at a
25 university where they're not necessarily trying to find

1 that that's a substance they could corner the market on,
2 there may be a possibility there for very creative
3 solutions. And as I think Lauren said, then also public
4 documents.

5 CO-CHAIRPERSON GEISER: So I have Dale, Debbie,
6 and Roger will be the last one. Please keep your comments
7 to a couple of minutes.

8 PANEL MEMBER JOHNSON: Okay. So first of all,
9 the 25, 17, 15, 10 approach is not to limit the scope of
10 the program. The scope of the program is the universe of
11 chemicals. The concept of the 25, let's say, compounds is
12 to be able to create a test set that you could actually
13 then validate and test this entire program. I'm holding
14 up the regulations for safe products. And this is
15 critical. You set up a flow chart of activities that are
16 going to take place. You have to be able to see that it
17 works. You have to validate it and look at it with a test
18 set of compounds. And that's what you do with any type of
19 process like this.

20 And this would start right from the beginning,
21 from your ability to do the prioritization and come up
22 with compounds of concern, because now you're putting in
23 the 25 things that affect California to the greatest
24 degree allows you to go into the alternative assessment,
25 allows you to do the different approaches for the

1 alternative assessment.

2 You can actually validate a third party against
3 an in-house type of approach. So it actually gets you to
4 a process that has a meaning and the meaning is it allows
5 you to work towards compounds that actually affect the
6 state of California. So that's why I like this particular
7 approach, but it has nothing to do with the scope of the
8 program overall. That's the universe of chemicals and
9 products.

10 CO-CHAIRPERSON GEISER: Debbie.

11 PANEL MEMBER RAPHAEL: Okay. I see some -- the
12 bottom line is I'm really interested in this tiered
13 approach. And when I look at this flow chart, I see three
14 tiers. I mean, the second one is called a focused
15 follow-up assessment. But to me, it's really the one that
16 goes deeper. It's a whole different level of assessment.
17 So I heard two things that really struck home to me that
18 appears to be diametrically opposed but need to be figured
19 out. One is the incredibly interesting and compelling set
20 of four or five things that Tim said about the need to
21 standardize. Every single one of them rang true to me as
22 to why we've got to standardize what an alternatives
23 assessment is. Weighing against that is the also true
24 statement that I know deep from my own experience is that
25 weighting various factors and alternatives assessment

1 depends on the use and the chemical you're looking at in
2 the moment. So that weighting resists standardization.

3 So given the fact that we have these two opposing
4 forces and we have a desire that I think Joe said so
5 eloquently to come out the other end in a timely manner
6 with something that is meaningful, I think the only way
7 out of that dilemma is with a tiered approach. And that
8 the Tier 1 as it's written now, to me, is a guidance
9 document to avoid regrettable substitutions that are quick
10 and easy. So I'm not even sure I'd call it an
11 alternatives assessment. I'd call it something else.

12 The Tier 2, to me, is the screening level that we
13 standardize to not let the perfect be the enemy of the
14 good, but to instill that kind of creativity and internal
15 innovation that we see over and over again when we're in
16 the government sector when businesses are asked to do
17 something unpleasant initially but can be a very powerful
18 experience.

19 And then the Tier 2 is actually this deeply
20 complicated list of all these factors that we all look at
21 and go, "Wow, I hope I don't have to do that alternatives
22 assessment, all that life cycle thinking." And for that
23 one, I would suggest what we need is a check-in where DTSC
24 requires progress reports. Because if it's going to take
25 time and we want to get to the end, we want to know that

1 the company is not sitting on it. They're given two years
2 and they do nothing until three months into it. So I
3 think progress reports is really important.

4 In terms of the small business, this is something
5 we're really grappling with with our own legislation at a
6 city level is how do we not put an undue burden on small
7 business. Again, this gets back to what is the
8 motivation. Is it based -- what Ann was saying -- I don't
9 know who was saying about the impact of the product on the
10 environment. That's a different question than the
11 capacity of a small business. If it's the latter that
12 we're worried about, then one approach we've taken is we
13 roll out a different time frame for them. So small
14 businesses are given a bigger grace period to gear up and
15 understand how this might impact them. They're also given
16 some hand-holding resources with universities and other
17 things to help them achieve the capacity for the
18 alternatives assessment. Because I think building
19 capacity there is every bit as important.

20 And that's it.

21 CO-CHAIRPERSON GEISER: Roger, you're last.

22 PANEL MEMBER MC FADDEN: Okay. Just two quick
23 things, Ken.

24 Building on the standardization idea, I think
25 it's really important that standards and criteria be

1 established for the certifiers, whether it be within
2 businesses or externally, that there be some clear
3 expectations on what the certification requirements would
4 be. Very important I think to spell those out.

5 The other one is -- and I guess this would be a
6 plea from the downstream providers of products who may or
7 may not be making products but have to pass them through
8 the end users. In any way that the certification
9 documentation that is -- I believe, if I remember, there
10 is a certification requirement that a manufacturer needs
11 to give to the downstream buyer or provider of the product
12 a certification document. I think it would be wise to
13 think about a way to collect those so that every business
14 doesn't have to do that, so that a manufacturer doesn't
15 have to replicate that again and again and again to one
16 retailer or two retailers, ten retailers. I think there
17 would be some real wisdom in looking at a way to level
18 that out. I'm not sure what that means. But just having
19 a mechanism by which you only have to submit it one time
20 would be very useful.

21 Thank you.

22 CO-CHAIRPERSON GEISER: Well, thank you, all. I
23 think once again we've marched through a huge amount of
24 comments that are very valuable.

25 I'm going to turn this over to Maziar to help

1 wrap this up here.

2 DTSC DIRECTOR MOVASSAGHI: I'm going to start off
3 by really thanking Ann, Kelly, and Ken and Debbie and Mike
4 Kirschner, guilty partners, for really putting the time
5 and coming up with this type of proposal. It's these
6 kinds of proposals that really got our intellectual juices
7 going and at least sometimes got us out of our own rut of
8 thinking. So we really appreciate it.

9 And I think from the type of discussion that got
10 generated today, I think your colleagues very much
11 benefited as well.

12 I'm going to say one thing. The small business
13 idea -- and we have yet to hear from a camp arguing for
14 that exemption. So I think we're hearing that loud and
15 clear. When we first heard it from the Alliance folks, we
16 thought, okay. But now I'm hearing from everybody,
17 including academics. So we heard that.

18 To the issue of life cycle analysis versus life
19 cycle thinking, that's been an important focus for us and
20 we will continue to have a focus. I just want to take the
21 time to bundle a few responses about a policy call we've
22 made. And if you all think this is the wrong policy call,
23 you can let us know either by contacting us later or
24 letting us know by the end of the day.

25 To the issue of whether DTSC is going to pick

1 winners or losers or not, to the issue of how do you
2 address cumulative impact, how do you give incentive to
3 businesses to engage in alternative assessment, our
4 general policy response has been as long as the
5 alternative is an improvement over the base line
6 condition, we can accept that alternative. We will assign
7 a regulatory response to mitigate the impact.

8 But that response, that alternative, feeds back
9 into the prioritization process, in a sense that, for
10 instance, in the way of not picking winners and losers, we
11 can imagine different manufacturers of the same consumer
12 product with the same chemical of concern that brought it
13 in might pick two different alternatives. The
14 manufacturer that picks the alternative with the least
15 footprint -- kind of the most improvement -- will have a
16 lower likelihood of ever going through the prioritization
17 process again. But if you're a manufacturer and you make
18 a minimal incremental improvement, you're going to go
19 through the process again. So there is a cost associated
20 with complying with regulations in a bit of an incentive.

21 That's one way we thought we can create that;
22 implement really one of those big principles of green
23 chemistry and that continuous improvement to get the
24 thousand-plus people and P&G, not to just get to one point
25 and say, "Okay, we're done," but to continually look for

1 stuff.

2 Now, if that's either the wrong policy call -- we
3 need to hear if there is a way to strengthen that policy
4 call because you all think that policy call is maybe too
5 weak. You can provide us input, like I said, later on
6 today or by e-mail. But we recognize that was a policy
7 call we've made.

8 The last thing I want to say is a number of you
9 have brought up this issue: Trade-offs. When we looked
10 at DFE and we're really looking at DFE as a big model,
11 especially for formulated products. P&G gave a great
12 example of a particular AA that made substantial
13 improvements on human toxicity parameter, but there was a
14 slight negative impact in aquatic toxicity.

15 And I believe whether this is standard practice
16 of DFE wouldn't allow that alternative to be able to move
17 forward because of that one minimal incremental hit on
18 aquatic toxicity. You know it goes back to the trade-off
19 Debbie mentioned between standardization and the weighting
20 factor. We want to be able to capture those improvements.
21 Say, okay, you've made an improvement over the base line.
22 There's still more work to do. But that's one way we're
23 making a policy call of the perfect not being the enemy of
24 the good. It's a good improvement. Maybe there is ways
25 you can mitigate it by assigning a regulatory response.

1 So again, those are two policy calls we've made.
2 If there is need to strengthen it, we can do it. And we
3 really appreciate the lessons learned.

4 CO-CHAIRPERSON GEISER: Great. Before we break,
5 Bill wanted to do a quick prep for the next session.

6 CO-CHAIRPERSON CARROLL: Thank you, Chair.

7 And I wanted to set up the next session. Our
8 goal in organizing this was to take the rest of the
9 document and have it in play for the final round of
10 discussion. And by my count, that would be Sections 1, 2,
11 5, and 7 through 10. Is that too standardized for you
12 all? In any event, if you want to think about where your
13 questions might be, those are the places that you might
14 start.

15 At this point, I have 3:37. If we could start
16 back at 3:50ish, maybe shave this just a hair and still
17 take close to an hour. If you punch yourselves out and
18 you don't need the time, that's okay, too. But let's try
19 to be back about 3:50. Thank you.

20 (Thereupon a recess was taken from 3:32 p.m.
21 to 3:51 p.m.)

22 CO-CHAIRPERSON CARROLL: All right. This is the
23 last session. Let me just kind of walk through this.
24 This is intended for areas that we've not had the
25 opportunity to discuss yet this afternoon. At the end --

1 first of all, at the beginning, Maziar has the opportunity
2 to make some comments. At the end, he will also make some
3 comments.

4 After that, I want to turn it over to Kathy who
5 will go over the Bagley-Keene restrictions for us and also
6 have some other advice about the way those of us who are
7 trapped -- I'm sorry -- staying here will be able to spend
8 the evening.

9 So Maziar, would you like to tee this up at all?

10 DTSC DIRECTOR MOVASSAGHI: Just very briefly on
11 the free-for-all.

12 So we're on the second of three stages of
13 reviewing the regs. The free-for-all at this point could
14 be concepts. It could be specific language as has been
15 discussed.

16 And I just want to set up our next review, the
17 third stage when we're reviewing the draft text. At that
18 point, we anticipate actually getting a red line version
19 of the draft text we're going to share with you, not
20 brand-new concepts and go figure it out. So this is a
21 good time if you want us to noodle something, put it on
22 the table. If not, you know, we're going to start writing
23 the regs.

24 CO-CHAIRPERSON CARROLL: All right. Very good.

25 So for the things that don't have to do with

1 prioritization or alternatives assessment, I see Dale's
2 flag. I see Joe's. Dale has mercifully taken his flag
3 down. Joe, go ahead. And I'll start keeping a list of
4 anyone else who would like in.

5 Joe, the floor is yours.

6 PANEL MEMBER GUTH: Okay. Just quickly, two
7 points on compliance, Section 10 on the last page,
8 violations. I see there is a list of them, but they start
9 with failure to submit alternative assessment work plan.
10 There's actually quite a few steps and representations
11 that come before that in the process. Section 1 --

12 CO-CHAIRPERSON CARROLL: Joe, please get a little
13 closer to the mike.

14 PANEL MEMBER GUTH: -- Section 1 and things that
15 need to be done, submission of data, et cetera. So I just
16 think we could use a more comprehensive set of potential
17 violations. I'm just suggesting that Section 10,
18 compliance, have a more comprehensive list of violations
19 that would be subject to I guess the potential penalties
20 or whatever the consequences are. It starts at
21 alternative assessment work plan, which is halfway through
22 the process. There are other requirements that come
23 earlier in the regs that I would suggest could be filled
24 in there.

25 And then my other issue I want to raise is with

1 respect to the very beginning scope section 1.B.,
2 certificate of compliance. I understand retailers are
3 very interested in this one. So this is the idea that
4 manufacturers will provide retailers with a statement of
5 compliance that the retailers then can use. It creates an
6 affirmative defense for retailers.

7 So I just want to throw this out there. I don't
8 know a lot about supply chains, but I know it's very
9 difficult to discipline supply chains. I guess a worry
10 about a retailer like K-Mart or Target buy 100,000 or a
11 million lunch boxes or pieces of jewelry from a
12 manufacturer in China or Brazil or India or whatever. And
13 in the contract there is a little form that gets signed.
14 We are in compliance with the DTSC rules. And it
15 basically -- I just wonder if that's really going to work.
16 And I just throw that out there. I guess I'm a little
17 skeptical.

18 CO-CHAIRPERSON CARROLL: Skeptical, Joe? You?
19 Thank you.

20 Anne.

21 PANEL MEMBER WALLIN: I don't think I'm out of
22 line again. Although a number of people made this comment
23 in the last section, so either I'm the only one that's
24 confused or this is not real clear yet how it's going to
25 work. I thought the decision on an alternative was going

1 to come in Section 7 of the regulatory response.

2 So I would echo some of the comments before. I
3 have a life cycle group that reports to me. And the joke
4 in the group is it doesn't matter what the question is,
5 the answer is always, "It depends." Okay. And you're
6 going to run into the same problem when you're weighing
7 greenhouse gases versus water versus toxicity, acute
8 toxicity versus chronic, ecotoxicity. And you're going to
9 find things that are better here, about a wash there,
10 worse over there. And you're going to have to make a
11 judgment. If I had them switch, is it really going to be
12 better? Or are you asking the manufacturers?

13 And, again, this guidance around how people make
14 those choices I think is going to be really important.
15 Because I don't think you're going to find things that are
16 going to be very clear cut in the vast majority of cases.

17 And then I appreciate the opening from Maziar
18 about what's missing, because what I'm really disappointed
19 here that there's no section on fostering innovation. So
20 I think what you're going to come out in some cases is you
21 don't really have the alternative that you want. You
22 might have one that's less bad. You might characterize
23 that as better, but you're not necessarily going to have
24 what you really want.

25 And I think there is an opportunity here to

1 foster innovation through any of a number of policy tools
2 that are in your toolbox, whether they're tax credits for
3 R&D, manufacturing, university grants. There are any of a
4 number of programs that I would urge you to take some
5 chunk of the very substantial amount of money that's going
6 to get spent on implementing this and put it toward
7 unleashing some creativity to come up with solutions that
8 nobody really even is thinking about today. But if they
9 were incentivized to go look for them, they might find
10 something that would surprise all of us.

11 Thank you.

12 CO-CHAIRPERSON CARROLL: Thank you, Anne.

13 Anne and Joe, please put your flags down.

14 Ken.

15 CO-CHAIRPERSON GEISER: Well, this is actually
16 going to follow Anne's comment I think well.

17 I think I just want to stress again to DTSC and
18 to us who are working on this that what we're doing here
19 is creating a big change in California, which has the
20 possibility of changing markets across the country. And I
21 don't want to lose that kind of big picture. I think that
22 it's possible as you folks work on the draft and also
23 possible as we give comments on the draft to be very
24 focused on the exact words and the definitions of specific
25 terms and other such things and to lose that bigger

1 perspective. Because it's been my experience in the
2 efforts I've done over the last, say, 30 years in drafting
3 legislation and seeing it play out that the law is one
4 piece of a larger change that happens because a good law
5 has a much bigger impact than what the law actually makes
6 happen. And that the shift in California to a set of
7 dialogues about what is a safer chemical or safer product
8 or whatever is so enormous to have a dialogue going on in
9 California about that subject -- and a big dialogue.
10 Meaning, lots of people are involved. Lots of people are
11 learning a new language. Lots are things are happening in
12 the market is really important.

13 What I would like to focus on is the
14 certification question, because I think that the
15 certification thing, if you think about it was a throw
16 away, we're wrong. As if it's just, oh, we have to get
17 people certified so they can go do this because otherwise
18 they'll do a bad job. Certification for us in
19 Massachusetts was a way of managing the market that the
20 law created. And this law is going to create a market as
21 all regulatory laws do. And this market is going to be
22 filled by a thundering group of people who are eager to
23 find ways to make money on this.

24 But that should be -- we should figure out a way
25 to capture that energy and make it work to our advantage.

1 We should know that these people who are going to be
2 certified, those people who are going to be training
3 certifiers are those institutions like the green product
4 assessment entities and all are part of a network that is
5 building a whole culture of practice here in California
6 that is changing the way we think about the dialogue about
7 safety and environmental quality of products.

8 And so I would urge DTSC not to let the
9 certification process stray too far from its control. And
10 that means that things like managing the kind of training
11 that's going on, managing who actually gets certified,
12 what are the standards for the certification, what do
13 people have to know. But not so much because it's a
14 regulatory thing, but rather because you want to get to
15 know those people and you want those people to be doubling
16 and tripling and quadrupling the activity you can do
17 yourself, because they will be out building the market and
18 changing. That dialogue that goes on between a
19 certified -- whatever they're going to be called --
20 assessor -- and firm is something you'll never see. But
21 that's where the point of action really is. And so I urge
22 you to pay special attention to the certification process.

23 And the reason why I'm worried about the
24 McDonough Brandguard (phonetic) thing a little bit is
25 because I want to make sure that's a very managed process

1 and not just -- I'm not trying to blame anybody there, but
2 people can get over eager to get into that market too fast
3 and miss the possibility of doing this as a real change in
4 California as a way of practice.

5 So might please spend a little time on this
6 certification thing. Keep it close. Follow who's going
7 to get trained, how they're going to get trained, and keep
8 those folks close so they can be real agents of the work
9 you're trying to get done. They will also be great in
10 preventing feedback, constituencies when this program is
11 up for cuts later and an appropriation and all you would
12 like to have that group of people standing at the
13 Legislature saying this program is critical and we want to
14 support it.

15 So my comments.

16 CO-CHAIRPERSON CARROLL: Thank you, Ken.

17 Now let me sort of let you know what I've got
18 here. I have Rich, Art, Debbie, Bob, and Megan. And I
19 think that's all the flags I see right now.

20 Rich, it's yours.

21 PANEL MEMBER LIROFF: Thank you, Chair.

22 Comment on the section, the regulatory response
23 require R&D. This is on the top of page 18 where it says,
24 "When this is a selected response, the manufacturer shall
25 fund the R&D and shall provide a written research and

1 development notice specifying X, Y and Z." And I found
2 myself thinking, gee, I'm not a lawyer, but can you
3 require somebody to do research and development as a
4 matter of law?

5 And second is probably a gentler way of phrasing
6 that, which is to set in motion a program to have research
7 and development conducted and picks up on the comment that
8 Lauren made earlier, which is make use of the
9 universities. There is an abundance of examples out there
10 of people coming together to do needed research and
11 development.

12 My example is the pharmaceutical roundtable which
13 gets to the point that was made earlier about research not
14 being done that ought to be done. And these are
15 pharmaceutical companies coming together to pool resources
16 that have -- to create a competition, really, to replace
17 energy intensive or wasteful production processes. You
18 find examples of lots of companies.

19 And I'll put Roger on the spot here. I think
20 Staples recently established some sort of green product
21 competition which is directed towards a whole bunch of
22 universities, unless I'm mixing up my competitions.

23 Anyway, suffice it to say there are lots of
24 examples out there. Wal-Mart offers another one,
25 Hewlett-Packard, where companies put out a pool of money

1 saying we have a problem that needs to be solved and we
2 want to foster a competition. And it's basically an RFP
3 process. And I think that's the way of fostering
4 innovation, spending the wealth, so to speak, and in
5 essence making sure the R&D while there may be some places
6 like P&G which have a very deep that can do it in-house,
7 there's certainly plenty of outfits that don't have
8 anywhere near P&G's capacity. And this is a way of paying
9 for the R&D.

10 Thank you, Chair.

11 CO-CHAIRPERSON CARROLL: Thank you, sir.

12 And Art, you're next.

13 PANEL MEMBER FONG: Thank you, Chair.

14 I just want to make a point on Section 5 in terms
15 of petition for inclusion of a chemical and/or product in
16 the prioritization process. What I'd like to see is
17 somewhere under Section B, DTSC introducing a mechanism
18 for industry input. It talks about petitioning public --
19 providing information to DTSC of chemicals that would be
20 of interest to them. I think it would be a real time
21 saver if you can put into the language a mechanism where
22 industry -- once DTSC gets the petition, DTSC would alert
23 the manufacturers to see in fact -- they have data that
24 can address some specific questions in the petition. And
25 I think that would be a time saver for facilitating this

1 process.

2 Thank you very much.

3 CO-CHAIRPERSON CARROLL: Thank you, Art.

4 Debbie, it's yours.

5 PANEL MEMBER RAPHAEL: I have one broad statement
6 that really piggy-backs on what Ken was saying and then
7 one very narrow statement.

8 The broad is when I read the certification
9 section, I really -- what jumped out at me is we're
10 creating an alternatives assessment economy here. And
11 it's very similar to what's going on right now with the
12 California Energy Commission. They are requiring audits
13 of existing buildings. They're not requiring that you
14 retrofit. They're requiring that you audit. And the
15 thinking is when you ask the question, "What am I doing
16 and how can I save money," you will just do it because it
17 makes sense to you.

18 Now, in order to meet the requirements of that
19 law, you have to use a certified auditor and they set
20 standards for what that audit would look like. So I see
21 this as a really parallel kind of process that we're doing
22 here where we're requiring an alternatives assessment,
23 which is essentially an internal audit. We're not
24 requiring that anyone actually do anything. If they
25 don't, they have regulatory consequences. And the idea

1 being is that when that conversation happens within a
2 business, good things happen.

3 So I just also would like to echo the fact that
4 while this section was very sketchy in terms of its
5 outline, I think in terms of impact, this is one of the
6 biggest impact areas of this entire document. And it's
7 not just us who thinks that. This is true in the energy
8 world, in the climate world. I think this is the kind of
9 path that governments are looking at now is how to get
10 change to happen. You get it by the more people asking
11 the question, the better. And so those would be credible
12 voices asking.

13 So I really want to just me too for what Ken
14 said. I think it's phenomenally important. And I
15 wouldn't rush it. If you don't have it all figured out by
16 the time the regs are written, let's get some other people
17 in this conversation, because you have some colleagues at
18 CEC you might want to talk to.

19 PANEL MEMBER HEINE: Speak more about how that
20 auditing process works or how it got set out. How were
21 the original auditors identified?

22 PANEL MEMBER RAPHAEL: Are you talking about for
23 the California Energy Commission?

24 PANEL MEMBER HEINE: Yes.

25 PANEL MEMBER RAPHAEL: Well, they're doing it

1 now. So it -- I don't remember the Assembly Bill. But
2 the CEC is working on this right now where they are
3 requiring that all existing buildings get benchmarked by
4 the Energy Star Program and they also perform audits.
5 There's this BPI. I can't remember what it stands for.
6 It's a nonprofit institute that creates the standard. So
7 I think it's an interesting area to look at that's going
8 on in California that's going on within Cal/EPA. So
9 interesting.

10 Was that a groan? CEC is not Cal/EPA? Oh,
11 Resources Agency. Oh, well. Reach out beyond the silos.

12 And then the narrow thing is when I was looking
13 at the regulatory response of product information
14 disclosure, that was number two under the regulatory
15 responses, one of the things that was missing for me was
16 that consumer information may include but is not limited
17 to the presence of the COC. I mean, what is the chemical
18 of concern that got it in there? I think it would be
19 nice. And the reason I think one of the benefits of that
20 for A -- and I don't know if this was implicit in A that
21 it can be mitigated by providing information to the
22 consumers, it allows the consumer to select an alternative
23 that does not require such a label. So I don't know if
24 that just didn't want to be explicit, but it felt missing
25 from that section. And that's it.

1 CO-CHAIRPERSON CARROLL: Thank you, Deb.

2 I have Bob, Megan, Tod, Roger, and Mike and then
3 Kelly. Bob.

4 PANEL MEMBER PEOPLES: Yes. I had a note and I
5 wanted to pick up on Anne's comment about innovation or
6 maybe the lack of recognition of innovation. I look at
7 this and I thought to myself green chemistry is not about
8 regulation. Green chemistry is not about lists of things
9 you shouldn't do or bad things to use. Green chemistry is
10 all about a systematic approach that cuts across all the
11 disciplines of chemistry and chemical engineering and can
12 drive innovation.

13 And I think it goes back to the comments I made
14 earlier on one of the sections with regards to finding a
15 way to do more than just say I support the principles of
16 green chemistry, but providing incentive to take action
17 with the application and principles of green chemistry.

18 And I think it ties in also to the idea of new
19 materials versus just alternative materials which always
20 goes to the issue of if you're replacing one thing that's
21 a chemical of concern, are you actually going to have
22 unintended consequences. We find out somewhere down the
23 road as opposed to applying the principles from a basic
24 design point of view to create a new material that doesn't
25 have those inherent negative characteristics associated

1 with it.

2 The other comment I would make, Joe brought up
3 the point questioning about compliance. In the carpet
4 standard development days, we considered many options.
5 And one of the options was put on the table was having an
6 officer of the company sign the compliance document,
7 because you elevate the attention and maybe the security
8 of the process a little bit if you have an officer of the
9 company participate.

10 CO-CHAIRPERSON CARROLL: Thank you, Bob.

11 Deb and Bob, would you put your flags down,
12 please? Very good.

13 Megan.

14 PANEL MEMBER SCHWURZMAN: Thanks.

15 I want to bring up an idea that hasn't been
16 discussed yet, and I don't know that it -- I don't know
17 that it belongs exactly in regulatory language, but I
18 think it's something that we should consider in the
19 process of developing the regulations about how to work it
20 in. And that is the concept of designing in the capacity
21 to evaluate progress. So when I think of any kind of
22 intervention you do, you want to design up front how
23 you're going to be able to tell how well you've made
24 progress.

25 And specifically what I mean about with regards

1 to this process, you know, we're always looking for more
2 information about what the externalized costs of the
3 current system are. And I think one of the great powers
4 behind TORA (phonetic) has been the information that it
5 did generate about the volume of hazardous substances in
6 use that was reduced and the amount of money saved by
7 firms in their hazardous waste fees and that kind of
8 thing.

9 And I think we could get pretty creative pretty
10 easily about the ways that we could start measuring
11 success or failures of the roll-out of this new paradigm
12 of alternatives assessment and identifying chemicals of
13 concern and their replacements. But that's going to take
14 a little bit of careful thought up front in terms of if
15 there is data that's being reported or information being
16 reported to the department, are there small easy-to-answer
17 questions that could be included in that request for
18 information that would provide us with a way of tracking
19 not even just the very simple questions of how many pounds
20 of -- let's see -- lead did you use in your company this
21 year versus the next year?

22 But also start to generate the information that
23 we currently don't have that lets us think much more
24 broadly about ecosystem services. For example, so how
25 much copper was kept out of sort of the watershed by this

1 product reformulation? And therefore, what was the value
2 to the salmon fishery? And we can start really expanding
3 the complexity of our understanding of the positive or
4 negative impacts on the environment or human health of
5 this kind of intervention.

6 And it's a whole collection of information that's
7 really missing right now that would really provide I think
8 a critical feedback to the process and we could see if we
9 are missing the low-hanging fruit. Or if we're getting
10 benefit that we never thought was possible, it could help
11 bolster the efforts or redirect them as need be. So I
12 think it requires a much more complex discussion than
13 that.

14 But I think it's well within reach of sort of if
15 there is a work group or something, some subset of people
16 who want to start thinking about what some of those
17 questions could be and what information would be useful to
18 gather, and then bring it back to DTSC or to the panel,
19 I'd be really interested in that process.

20 CO-CHAIRPERSON CARROLL: Thank you, Megan.

21 Tod.

22 PANEL MEMBER DELANEY: Thank you.

23 One of the things I wanted to talk about is the
24 area that both Deb and Ken had just recently brought up
25 with regards to the certification and what it really goes

1 to. And we've been through this really for about the last
2 four years with the American National Standards Institute
3 dealing with competency for verifiers and validators for
4 greenhouse gas studies, not only for projects but also for
5 entities. And you look at all the different sectors. And
6 there are a number of parallels between the things we have
7 to do as a validator verifier and a number of things that
8 are going to have to be done under the certification
9 program.

10 And there's one of the things that I think would
11 really help you folks a lot is an ISO standard called
12 14066 which deals with the competency, in our particular
13 case, for greenhouse validators and verifiers. But it can
14 be very easily moved over to this, because you're really
15 going to have to do this at least if you're looking at it
16 from a third-party verification or third-party
17 certification. You're going to have to look at this as a
18 team approach, because there is no single individual who
19 will be able to have all the competencies that are needed
20 to do this. And this is all set up through the 14065 and
21 66.

22 And I've been on the ANSE (phonetic) Committee
23 for the last three years, in fact, the Chairman of the
24 Competency Committee. So this is something that would be
25 very, very helpful to you, and it will be starting here

1 primarily in California with this.

2 But most of the places where you're going to have
3 to visit to do this are in other places other than
4 California. So it will end up being as soon as this rolls
5 out a national program that you will have to start
6 developing that.

7 CO-CHAIRPERSON CARROLL: Thank you, Tod.

8 All I can say is I would love at some point in my
9 career to be Chair of the Competency Committee.

10 (Laughter)

11 CO-CHAIRPERSON CARROLL: What a wonderful title.

12 Roger.

13 PANEL MEMBER MC FADDEN: Thank you, Bill.

14 I guess me, too, comment about the auditing.
15 We've all heard the statement what gets measured gets
16 done. I think what gets audited gets done right many
17 times. So I would certainly ditto the comments around
18 having a robust auditing approach to this.

19 Draw your attention to page 17, 6.B.3. And I'll
20 avoid asking the questions, Bill, because you've already
21 scolded several people for that. So let me see if I can
22 phrase this in such a way that it's not a question.

23 It could be problematic to require financial
24 assurance by manufacturers -- how will it work? What kind
25 of a financial guarantee -- I think the word "guarantee"

1 is a scary word for our legal eagles in businesses. What
2 is meant by the guarantee and what are we guaranteeing to
3 do? And what happens if we fail to follow through?

4 So I would just suggest that there be a lot of
5 clarification of this particular area so everybody
6 understands what the guarantee expectation would be,
7 financial guarantee by the way would be in that regard.

8 Thank you.

9 CO-CHAIRPERSON CARROLL: Thank you, sir.

10 I hadn't realized that what we created here this
11 afternoon was anti-jeopardy where you're not allowed to
12 phrase things in the form of a question.

13 Okay. I have Mike, Kelly, Dele, Tim, and Lauren.

14 Mike, it's yours.

15 PANEL MEMBER WILSON: Mike Wilson, U.C.,

16 Berkeley. I have two comments.

17 One is on a point about the regulatory response
18 actions on the requirement for product information
19 disclosure to consumers. And this is sort of getting into
20 the area of labeling that I would encourage the framing or
21 the requirements that go into a potential label to be
22 rather than sort of an up or down sort of green or not
23 green label, if you will. Or in this case, you know, what
24 are stipulated here are really most of these are MSDS
25 kinds of actions, if you will, or information points. And

1 I think what would be more useful would be a labeling
2 system that gives you a scale on one to ten. For example,
3 an eight or ten of our different metrics that we are
4 trying to move companies toward. So a scale of one to ten
5 on energy efficiency, a scale of one to ten on a number of
6 measures of toxicity, for example, water use with the idea
7 that that would motivate continual improvement rather than
8 a label that gives you sort of an up or down. And once
9 you have the up, you're sort of done. That's a smaller
10 point.

11 I think the larger point -- and this is picking
12 up on Ken's opening comment around the certification. I
13 also see this as extremely important and want to point the
14 Committee to the success that California has experienced
15 with its agricultural extension service that California
16 put in place a means for -- in this case, it was the
17 University of California to deploy the resources of the
18 research and student activities within the university
19 toward agricultural problems facing the state and put in
20 place a way to sort of level who are essentially toxic use
21 reduction planners in many ways who are focused on the
22 agriculture sector. They are the bridge between the
23 growers and the U.C. system.

24 And so if you go to -- and one of the beauties of
25 it is you go to the U.C. agricultural extension website

1 and you enter in a pest that you're having a problem with.
2 All of the research and activities of the extension
3 service are in the public domain and it gives you the
4 entire alternatives assessment, if we are dealing with
5 that pest on that crop during this season and so forth.
6 This extraordinarily rich alternatives assessment is
7 essentially what it is for the agricultural industry in
8 California.

9 And I think that if I could reiterate Ken's point
10 where this certification process goes, I think it would be
11 a mistake for it to be privatized across entities across
12 the state for which we would have sort of difficulty
13 ensuring accountability and transparency and a lot of
14 oversight.

15 And there may be a role for nonprofit entities of
16 some kind to do this. But I guess I want to encourage --
17 maybe orient this aspect of the regulation toward the
18 state's state university system, to the community college
19 system, and to the U.C. system, with the idea that in
20 doing that we train the next generation of people. We
21 have a public process and we leverage the resources of
22 this really world-class educational system in the country
23 so that we can -- the CSUs can be teaching. U.C. can be
24 doing research and teaching and so forth on the problems
25 that are immediately facing businesses and industry in the

1 state. And we have that direct line of communication.

2 And, of course, obviously we'd be interested in
3 helping think that through how that could be done in an
4 appropriate way in this forum.

5 CO-CHAIRPERSON CARROLL: Very good. Thank you,
6 Mike.

7 Kelly.

8 PANEL MEMBER MORAN: I just had one point and in
9 the process of hearing a couple things just want to make a
10 couple of comments.

11 I want to support the evaluation issue that
12 several people have mentioned and suggest that the
13 department may wish to include in the regulations the
14 authority to require evaluation measures in a couple
15 different places. And one of those is in the response
16 actions section that particularly if there is a response
17 action that is not a substitution with something that's
18 less harmful that the department may wish to require --
19 should give itself the ability to require tracking of how
20 much did we collect? What effect did our product
21 stewardship action have? All of those other kinds of
22 things so you'd be able to see how much is being handled
23 through that inter-mitigation measure.

24 The other is that in the implementation plan
25 there probably should be some ability for the department

1 to say here's how much lead wasn't released into the
2 environment. We took X much out and produced so much per
3 year, so this is so many pounds. The department is going
4 to want that kind of data to show that value of its
5 program.

6 And you may wish to include in there -- I'd
7 suggest that in some mechanism you consider including the
8 ability to require some kind of environmental monitoring
9 because there aren't ongoing programs to monitor a lot of
10 these things. And there may be cases where you're going
11 to want to have that ability.

12 And the second diversion from the points I was
13 actually going to make is Mike brought up this University
14 of California pest control example. That's an example to
15 me of a place where the pollution -- the analogy for that
16 would be where DTSC's pollution prevention program can
17 really make a difference. And we're going to talk about
18 this tomorrow. But the example that Mike gave is a very
19 compelling one. It's where there are hard pest problems,
20 the State has invested in evaluating the alternatives,
21 including many safer alternatives through integrative pest
22 management and has made that information broadly
23 available. And it's particularly there to help smaller
24 businesses, farmers, and other folks who aren't
25 necessarily the huge agriculture row businesses who really

1 use this resource.

2 So I wanted to call that example to your
3 attention to cogitate on overnight so we come back
4 tomorrow to talk about pollution prevention you'll have
5 more ideas.

6 So the main thing I wanted to say is a little bit
7 of a downer, but I wanted to get it out here because I do
8 have a little bit of advice in this area. The downer is
9 in the big picture when I read this regulation, I was just
10 flashing to pesticide regulation all the time. And
11 pesticides are one of the only other consumer products for
12 which there is a regulatory program that's been in place
13 in California and nationally for a long time. And the
14 intent of that program was to prevent pollution of humans
15 in the environment. And that program has not worked
16 particularly well, particularly in terms of the
17 environment.

18 And I've been examining why that haven't worked.
19 I had a great deal of personal experience with that. And
20 the things that are important for this that I saw in the
21 design that leapt out at me were the time frame pieces.
22 So all the kind of no real specific time frames and the
23 abilities to request extensions and so forth, that the
24 issue that Tim raised the clarity of the decisions, the
25 decision making standards. And there were a lot of places

1 where I read the language and I said, wow, this is exactly
2 the kind of language that appears in pesticide law or
3 regulations that has formed the basis for litigation
4 against the State that's been quite costly. And although
5 the regulations written in the law are written in some
6 cases very expensively, litigation has dramatically
7 narrowed the authorities, particularly the authority of
8 DPR to do things.

9 You don't want to write yourselves a regulation
10 that puts yourself in that position. The result is
11 paralysis by analysis. I know that's something we really
12 want to avoid. There's been a huge length of time
13 investment on the part of pesticide regulators to take any
14 actions. I mean, they know DPR finds there is an
15 environmental problem, they spend ten or twelve years on
16 average just re-evaluating a pesticide before they can do
17 anything. Those kinds of time frames are just totally
18 unacceptable to the public, and the costs associated with
19 them rack up really quickly. And as a result, the agency,
20 instead of -- when it's making decisions, instead of being
21 motivated by what's appropriate public policy for
22 California and good for our future, our children, our
23 businesses, they wind up being driven by fear of
24 litigation. And you see that when you talk to staff.
25 They're always thinking about how are we going to get sued

1 over making this decision. So inaction is rewarded.

2 And I know that's not the intent of the Green
3 Chemistry Initiative, nor of this department in this area.
4 So the bottom line is I'm really concerned that we develop
5 a structure that would in some way reward inaction. This
6 is what Bill Carroll said earlier or that penalizes the
7 agency for making decisions. We need to not do those
8 things.

9 So to that end, I wish I had a more specific
10 suggestion, but many of these are legal things. So I
11 would suggest that you read over as you're progressing
12 through this that you read over this with some of those
13 examples in mind.

14 And while I might wish to refer you to your own
15 attorneys or DPRs, you might actually get some really good
16 help from the attorney general's office, because they're
17 used to defending the State and have been around all the
18 reasons for litigating. And I can think of a person in
19 particular who would probably be thrilled to help you.
20 I'd look through and think about it from that lens a
21 little bit. I think that some minor adjustments would
22 make a really big difference.

23 CO-CHAIRPERSON CARROLL: Thank you, Kelly.

24 Let's check where we are. I have Dele, Tim,
25 Lauren. I'm going to move Jae ahead of you, Rich. You'll

1 be on the second round. We're at about 4:30. We have
2 about 20 minutes. I think we're in pretty good shape with
3 the number of interventions that we've had.

4 Go ahead, Dele.

5 PANEL MEMBER OGUNSEITAN: Thank you.

6 I'm not sure this is what Kelly was referring to
7 in her comments about litigation and time for it. Because
8 I saw in Section 7 gaps in times of reference to how
9 quickly one would impose this regulator response actions.
10 So, for example, there are points in Section A effective
11 so many days, but when you get to the labeling the
12 restrictions, we have no information on how long this will
13 go on for before something actually happens. And I'm not
14 sure that's a good or bad thing. But when I hear you, I
15 think you want some kind of time line here about when
16 those things should happen. So I will support that.

17 The second comment is about -- I think Art raised
18 this. And I just want a clarification from him or help us
19 think a little bit more about this. I support having the
20 manufacturer have an opportunity for rebuttal or appeal,
21 especially under Section B when DTSC is conducting
22 technical assessment of the petition. What we have is
23 otherwise readily available information to the department.
24 If it's simply based on a third party providing their take
25 on what's in the product without getting information from

1 the manufacturer before we can make a decision, this could
2 be problematic. And also the Section D is where
3 manufacturers are notified after the decision is made.
4 But there is no opportunity to provide an appeal to that
5 decision. And I think that's probably -- (inaudible).

6 CO-CHAIRPERSON CARROLL: Very good. Thank you,
7 Dele.

8 Tim.

9 PANEL MEMBER MALLOY: Thank you.

10 I just had a couple of points. One, in the
11 definition section, the definition of consumer product
12 continues to be very vague, kind of doubling back on
13 itself to the definition that appears in SB 509, which is
14 referenced in the statute. And I don't think we've
15 resolved this issue anywhere in the regulations about
16 occupational use of chemicals.

17 And from a policy standpoint, it seems to me this
18 statute ought to cover chemical used in occupational
19 settings. And from a statutory standpoint, the definition
20 of consumer product is very broad and isn't limited to
21 kind of the colloquial interpretation that we would
22 normally think of in terms of products used by individuals
23 purchased in retail settings. So I think that's an
24 important thing that ought to be resolved. And I guess
25 I've said a number of times which way I think it ought to

1 come out.

2 The other -- I agree with Kelly. I think there
3 is a lot of language in here that seems could limit the
4 agency's ability to implement the statute. On page 16,
5 there is a section there that in 7.B. in specific
6 requirements it states that the department will not impose
7 regulatory responses that conflicts with or duplicates a
8 requirement of another California, United States
9 regulatory program, or an international trade agreement.

10 So I got a few concerns about that. One is it's
11 not really clear what conflicts mean. So for example, one
12 could imagine EPA imposing some risk management provisions
13 on a chemical. Would a phase out or ban of that chemical
14 under California constitute a conflict with the EPA
15 standard?

16 And also an international trade agreement, that
17 raises some issues. Particularly, there are international
18 trade agreements one would imagine that haven't been
19 ratified by the Senate. Right? So we could have
20 international trade agreements that don't even have status
21 under U.S. law that could impact what happens in
22 California. So that creates a lot of concern for me.

23 The other major one is when there is a listing
24 here of regulatory response actions. There are some in
25 which the language says the action would be imposed at a

1 minimum and then it gives some standards for which you
2 would impose it. So take back on page I think it's 17 is
3 an example of this. And yet with respect to prohibitions
4 or phase outs, the language is much squishier. It says,
5 "Situations in which this response may be appropriate
6 include," and then the department determines
7 technologically or economically viable safer alternative
8 already exists.

9 I think following up on Joe's point about what
10 the goal of the statute is, that appears to me to be
11 really weak. If you've got a situation in which a
12 technologically and economically viable safer alternative
13 already exists, it seems that there ought to be more of a
14 preference to phase out the other chemical. Certainly
15 individual circumstances may lead you to not adopt that
16 preference. But this is very, very soft language and I
17 think it could limit your ability later on.

18 Two little things. One, I'm not really clear
19 what the audit provision is. It seems like the last
20 provision it reads like an audit of the program, right,
21 versus an audit of individual alternative assessment
22 reports. Because there is a provision in here for
23 department review and determination on individual
24 alternatives assessment reports in which one would expect
25 that's going to be kind of a rigorous review of the

1 individual alternative assessment, which I would think
2 would cover many of the things that are listed in the
3 audit. So I won't ask the question. But if I were asking
4 questions, one question I would ask would be what's the
5 audit really after?

6 And then lastly, I would just say, you know,
7 there's one response action in the statute that's not in
8 the regs in that it gives DTSC the authority to select
9 other appropriate response actions. And I think that's an
10 important backstop. It could be in a particular situation
11 a list that we have here really doesn't capture that
12 particular solution. So I would encourage you to include
13 that back stop kind of an omnibus authority that would
14 allow you to respond to idiosyncratic scenarios.

15 Thank you.

16 CO-CHAIRPERSON CARROLL: Thank you, Tim.

17 I have Lauren and then Jae.

18 PANEL MEMBER HEINE: Thanks.

19 I'd like to speak to the certification. I'm
20 looking at the way this certification is set up and
21 wondering if DTSC needs to think about certifying
22 individuals or organization based on narrower levels of
23 expertise, not just the life cycle thinking versus
24 auditable. But there are going to be people who have
25 expertise in social issues or economic issues or life

1 cycle assessment.

2 And then there are others who have expertise in
3 ecological toxicity assessment or human toxicity
4 assessment. And they're not necessarily going to be the
5 same people. And unless you just want to be supporting
6 large organizations with diverse people so they can cover
7 the spectrum of the effects and the spectrum of the life
8 cycle impacts, it seems like you might want to be
9 considering certifying individuals for different elements
10 of the alternatives assessment. So you might have people
11 who are qualified to look at, say, life cycle impact,
12 resource consumption of water or others who can certify --
13 look at the toxicity, diverse logistics, things like that,
14 just another way to slice the certification pie.

15 CO-CHAIRPERSON CARROLL: Thank you, Lauren.

16 Jae and then Richard.

17 PANEL MEMBER CHOI: This is just a general
18 comment, if you haven't thought about it. I have been
19 considering the questions from the community and the
20 company when we ask for checklist for design for
21 environment. So I questions like is lead in row houses.
22 One percent, you know -- so actually .01 percent. The
23 rest, it .1 percent. So instead of me or my team
24 answering questions like that every day, what we did, we
25 tried to put some website link, not as a footnote or

1 reference, but right below what the question is. So
2 probably in general at this stage you may try that, so
3 that if I'm to fill out this, submit, and I don't have to
4 go through all this reference of findings. But right
5 there I just click it and it's linking to that website.
6 So it's much easier for me to follow with the document.

7 CO-CHAIRPERSON CARROLL: Thank you, Jae.

8 Richard, you have the last comments, unless
9 someone has something to say.

10 And then Maziar, it's yours.

11 PANEL MEMBER LIROFF: This is very brief. I just
12 want to follow up my earlier comment about R&D. I looked
13 in the statute and it says that the agency can impose a
14 requirement to fund green chemistry challenge grants where
15 no feasible safer alternative exists. So one, yes, you
16 have the authority.

17 And two, statute does follow the suggestion I
18 made, which is create some sort of grant or challenge
19 program. So presumably as you're drafting the actual
20 regulations, they will be true to the statute.

21 CO-CHAIRPERSON CARROLL: Very good. Thank you.

22 Maziar, it's yours.

23 DTSC DIRECTOR MOVASSAGHI: I have to tell you
24 when we were first talking about free skating,
25 free-flowing discussions, I was wondering, you know, what

1 was this hour going to be like. But I have to tell you,
2 in this hour, we have heard more new items that no one
3 else has raised with us as we've developed the outline.
4 Some of your comments are pointing to other certification
5 models, the role of auditing, what the real purpose of the
6 certifier should be, and reminding us to keep a focus on
7 innovation, because that has to be one of our goals. And
8 tying this concept of an R&D challenge grant and getting
9 the universities competing with one another, I think those
10 are all wonderful, great ideas. So this has actually been
11 very informative for me, because there are a whole bunch
12 of new ideas.

13 The other thing I want to wrap up today about --
14 I forgot to mention this at the end of the AA section --
15 was that we are on the 9th of June -- did I get it
16 right -- 9th of June, we will have a first symposium where
17 we invited folks from DFE, Proctor and Gamble, couple
18 other organizations to come discuss alternatives
19 assessment. We're going to follow up with another one
20 later in the fall.

21 And this goes to what Ken was saying about
22 getting the dialogue going. Because what was really
23 interesting from our point of view when we were going
24 through our legislative oversight hearings, you know, we
25 expected the questions about the technical know-how, about

1 the processes and such. But one common element that
2 constantly came up from different camps was this concept
3 of trust. And it's not a one-way trust. This is not just
4 a trust of NGOs to industry folks. Industry folks need to
5 have trust of us as regulators and the other watchdog
6 groups as well. And that really highlighted the need from
7 our point of view to get these dialogues going. So you're
8 dead-on right.

9 We are in the planning process of proposing a
10 number of symposium brown bags to talk about alternative
11 assessment, to get companies to come talk about some of
12 the decisions they made, because what's been very
13 informative for us sometimes is when companies have shared
14 with us chemicals that they've decided not to use, they've
15 rejected in their acquisition models. And that was very
16 informative to us. But I'm not sure it's ever been
17 discussed in a public setting.

18 So some of you might be getting calls from us
19 asking for you to be on those panels or if you know
20 interesting companies that fit the rubric of what we're
21 looking for, but that's intended to get us at the dialogue
22 as well. But I really appreciated some of the stuff that
23 came up today.

24 And the university challenge grant is a very
25 interesting concept. And a friend of mine in the robotics

1 business talks about how the top ten patent producers in
2 robotics were all kids that started in these robotics
3 competitions within universities. I don't know if you've
4 seen this where they get the machines to go at each other
5 to destroy each other. That produces the top ten patent
6 providers. I'm thinking that's a brilliant idea.

7 I'm going to wrap up with what Meg said and Kelly
8 was setting up tomorrow properly, this concept if you all
9 go back to the Green Chemistry Initiative report, there is
10 a segment that we talk about the footprint indicator,
11 there is an example of a spider footprint and the need for
12 us to start putting those out there.

13 So Mike brought up the issue of getting a couple
14 of factors in there to get continuous improvement, get us
15 in a way to think about how we demonstrate that we've been
16 able to prevent pollution. Because that's sometimes very,
17 very hard, especially when you're fighting for scarce
18 resources, we need to be able to demonstrate it. So as
19 part of the discussion for tomorrow, we'd like to hear
20 innovative ideas about how to prevent pollution, but also
21 how do we measure and demonstrate or tell our story about
22 what it is that we prevented. So this is some food for
23 thought to set us up for tomorrow. So thank you.

24 CO-CHAIRPERSON CARROLL: Thank you, Maziar.

25 Kathy, the floor is yours.

1 MS. BARWICK: So I'm going to do just a couple of
2 housekeeping items before we close. And thank you all so
3 much for a wonderfully productive day.

4 I want to remind you about our Bagley-Keene Open
5 Meetings Act, which would warn us against having
6 substantive conversations with a quorum of the panel
7 that's not conducted before the public. So as you go and
8 have social hours this evening, things especially related
9 to the agenda, you want to be careful about that. And I
10 know you've all read the Bagley-Keene handy guide, so
11 that's just a brief reminder.

12 PANEL MEMBER SCHWURZMAN: Kathy, what is the
13 current quorum?

14 MS. BARWICK: It's still 13. And I'm going to
15 make a little announcement about some thoughts I have
16 about where you might want to go for dinner, but for now
17 this meeting is closed. Thank you so much.

18 (Thereupon the meeting was recessed at 4:46 p.m.)

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2 I, TIFFANY C. KRAFT, a Certified Shorthand
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