

MEETING
OF THE
SCIENTIFIC REVIEW PANEL ON TOXIC AIR CONTAMINANTS
CALIFORNIA AIR RESOURCES BOARD

HILTON OAKLAND AIRPORT
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JAMES F. PETERS, CSR, RPR
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APPEARANCES

MEMBERS PRESENT

Dr. John Froines, Chairperson

Dr. Paul D. Blanc

Dr. Gary Friedman

Dr. Stanton Glantz

Dr. Hanspeter Witschi

REPRESENTING THE CALIFORNIA AIR RESOURCES BOARD

Mr. Jim Behrmann

Mr. Bob Jenne

Mr. Peter Mathews

REPRESENTING THE OFFICE OF ENVIRONMENTAL HEALTH HAZARD
ASSESSMENT

Dr. George V. Alexeef, Deputy Director for Scientific
Affairs

Dr. Joan Denton, Director

Dr. Melanie Marty, Supervising Toxicologist

Dr. Andy Salmon, Chief, Air Toxicology and Risk Assessment
Unit

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PROCEEDINGS

1

2 CHAIRPERSON FROINES: I think we're ready to
3 begin here. We will formally open the meeting of the
4 Scientific Review Panel on Toxic Air Contaminants for July
5 30th, 2001. And we're a little bit past 11:00 o'clock.

6 We had two panel members whose plane was
7 cancelled and who are being flown to San Jose and then
8 bused here, so we anticipate their arrival sometime before
9 we end, but who knows how soon that will be.

10 I would like to change the order of the
11 discussion for today, and start with the panel
12 administrative matters. And the first item, I'd like to
13 raise concerns the fact that Joan Denton, the Director of
14 OEHHA, is here and would like to make a few remarks.

15 Joan.

16 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT

17 DIRECTOR DENTON: Good morning to the panel members. I
18 couldn't help when I was coming down this morning to speak
19 to you to recall the years of experience that I've had
20 with this panel and with the panel members specifically.

21 As you recall, I was actually was actually, I
22 think, doing Peter Matthews job for many years. And then
23 I also worked at SSD and was a Section Chief there on the
24 exposure information and now I come to you as the Director
25 of OEHHA. And it's indeed a pleasure for me to be back.

1 And I'm actually here to -- well, I think for two
2 things. First of all, I wanted to thank the panel for all
3 of your work on SB 25. This is a critical program for
4 OEHHA. And your input is critical to the success and the
5 scientific integrity of the program.

6 So the panel meetings that you've had. I think
7 you've had four now maybe five, we really, truly
8 appreciate the work that you've done.

9 The other reason that I'm here is one of a
10 ceremonial duty. And that is that this last spring, Dr.
11 Froines resigned as a member of our Carcinogen
12 Identification Committee. In fact, two of the individuals
13 who worked on the CIC Lawrence Zise and Martha Sandy I
14 think Andy Salmon to my right have worked over the years
15 with John on the, CIC.

16 But at any rate, I wanted to bring and present to
17 John officially from OEHHA and the Administration two
18 pieces of paper, I guess. One is a resolution and then
19 one is a statement signed by the Governor. So with your
20 indulgence, I'd like to read for you the resolution.

21 The resolution was signed by Winston Hickox, the
22 Secretary for Environmental Protection. And let me read
23 that to you first.

24 CHAIRPERSON FROINES: You see why I changed the
25 order.

1 (Laughter.)

2 PANEL MEMBER GLANTZ: I hope that doesn't mean
3 your resigning from this panel.

4 CHAIRPERSON FROINES: No, I resigned because of
5 this. It's because we meet every month.

6 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT

7 DIRECTOR DENTON: So this is the plaque or this is the
8 resolution, John. And I will read it quickly for you.

9 It's in recognition of service.

10 And it says, "Whereas as Dr. John
11 Froines has served with distinction as a
12 founding member of OEHHA's Science
13 Advisory Board, CIC Committee," I
14 believe that was in 1994. "And;

15 "Whereas, as member of CIC for seven
16 years, he participated in the evaluation
17 of complex data on numerous hazardous
18 chemicals to determine whether they have
19 been clearly shown through
20 scientifically accepted principles to
21 cause cancer, and

22 "Whereas he has provided insightful
23 leadership in decision made by the CIC
24 to determine which chemicals to place on
25 the Prop 65 list of chemicals known to

1 the State to cause cancer, and

2 "Whereas his service on the CIC
3 committee has benefited the people of
4 California by helping to ensure they
5 will receive clear and reasonable notice
6 of exposure to cancer causing chemicals
7 listed by the Committee during his
8 tenure." This is you we're talking
9 right, John.

10 "Whereas he is the chairman of
11 Scientific Review Panel for the Air
12 Resources Board and provides expert
13 advice on identification, monitoring and
14 control of toxic air contaminants, and

15 "Whereas he is currently a
16 professor, the Director of the Center of
17 Occupational and Environmental Health
18 and co-director of the Pollution
19 Prevention Education and Research Center
20 at the University of California, Los
21 Angeles, where he furthers the knowledge
22 and understanding of the risk factors
23 and occupational disease and the health
24 effects from exposure to air pollution,
25 and

1 "Whereas, he is a member of the
2 National Toxicology Program's Board of
3 Scientific Counselors Report on
4 Carcinogens Subcommittee, which
5 identifies substances or exposure
6 situations associated with technological
7 processes that might cause cancer and to
8 which a significant number of persons in
9 the United States are exposed, and

10 This is the last whereas, "Whereas
11 he has consistently provided keen
12 scientific analyses of toxicological
13 issues in the area of cancer
14 identification, has been an invaluable
15 advisor to the State, and has dedicated
16 endless hours towards the improvement of
17 the environment and the public health of
18 the people of California,

19 "Therefore, I, Winston H Hickox,
20 Secretary of the California
21 Environmental Protection Agency, do
22 hereby recognize, Dr. John R. Froines
23 for his years of outstanding public
24 service to the people of the State of
25 California."

1 And it's signed by Winston. Let me read the
2 other that's signed by the Governor. And this is a
3 commendation for Dr. Join Froines, April 26th, 2001.

4 "It is a great pleasure to recognize
5 your outstanding record of leadership in
6 service to our great State. I salute
7 your extraordinary commitment to
8 improving public health and protecting
9 the environment.

10 "From serving on the Carcinogen
11 Identification Committee to your role as
12 Director of the Center for Occupational
13 and environmental health, you have made
14 a positive and lasting impact on many
15 lives.

16 "Your hard work and dedication to
17 excellence serves as an inspiration for
18 all Californians.

19 "On behalf of the people of the
20 State of California, I extend my best
21 wishes for continued success.

22 "Governor, Gray Davis."

23 And I came today because I wanted to present
24 these to you, John, in the company of your peers to let
25 you know how much we appreciate your service, how much we

1 value your continued advice, and how much we look forward
2 to working with you on a continued basis.

3 So if I might lead in a round of applause for
4 John.

5 (Applause.)

6 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT
7 DIRECTOR DENTON: They're all framed and ready to go John.

8 PANEL MEMBER GLANTZ: The record should reflect
9 that he's blushing.

10 (Laughter.)

11 CHAIRPERSON FROINES: That's because of my
12 Norwegian heritage.

13 Thank you very much Joan. You can see everybody
14 what the benefits of to resigning.

15 (Laughter.)

16 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT
17 DIRECTOR DENTON: Don't think about it.

18 (Laughter.)

19 CHAIRPERSON FROINES: Thank you very much.

20 Melanie's right at the table within the 30-second
21 pause, so we don't get to sort of luxuriate in this.

22 (Laughter.)

23 SUPERVISING TOXICOLOGIST MARTY: No. No, I
24 haven't said anything yet.

25 PANEL MEMBER GLANTZ: Melanie is happy because

1 she thinks this is going to be over now.

2 CHAIRPERSON FROINES: I do want to raise an
3 administrative issue, which is I had sent an Email to
4 individual panel members with some suggested guidelines.
5 And people got back to me as individuals, but I wanted to
6 have a public discussion so that a collective decision
7 could be made.

8 Basically, what I had proposed is that we require
9 information that is coming to the panel for its
10 consideration be sent to the Air Resources Board at least
11 ten working days prior to a particular meeting, and that
12 the review and comments then come to the panel for its
13 consideration.

14 And I may have the precise dates mixed up. Did I
15 post ten days with review and comments to the panel? I
16 think that must have been it. Jim, do you remember? I
17 think what I wanted was submission and review and comments
18 and then to the panel ten days prior to the meeting.

19 MR. BEHRMANN: My name is Jim Behrmann. Chairman
20 Froines, you had proposed approximately a two-week time
21 period which would include the comments coming to the
22 agencies or departments. And then one week prior to the
23 meeting the agencies would provide their responses along
24 with the comments.

25 CHAIRPERSON FROINES: And, you know, some years

1 ago, we had very fixed guidelines, and everybody met them
2 and everybody was happy -- were not always happy with
3 them, but those were the rules that we lived by, so that
4 we weren't getting things, because five or so year ago we
5 were getting Federal Express packages the night before a
6 meat, and everybody was quite upset about that.

7 And so we worked out an orderly process. And
8 over time that orderly process has slipped somewhat. And
9 some in some ways for reasons -- I mean, sometimes the
10 time frames are tight, but I think that the panel can only
11 function effectively if we have a reasonable time frame.

12 So my view is that two weeks, I think, is not
13 good. I think we should stay ten working days, which
14 makes it two weeks, but ten working days as the criteria
15 materials should be submitted to the panel. And then the
16 panel should receive comments no less than five working
17 days before the particular meeting. So that's the point
18 that I wanted to raise for everybody's discussion.

19 MR. BEHRMANN: If I might, Dr. Froines, you had
20 also proposed then to work with the panel and with the
21 Department's to plan meeting dates further in advance, and
22 then have a longer notice period, so that there would be
23 time in which people can review and comment.

24 CHAIRPERSON FROINES: Once we've set out this
25 kind of criteria, we clearly have to work to ensure that

1 the meetings are planned for enough in advance so that
2 everybody from the public has a reasonable time to make
3 comments, and it's not a shrunken process, if you will.

4 So comments.

5 PANEL MEMBER GLANTZ: I think it makes a lot of
6 sense. Public comments aren't any good if you don't get
7 them in time to think about them.

8 CHAIRPERSON FROINES: Do we need a motion on
9 this?

10 PANEL MEMBER GLANTZ: I so move.

11 PANEL MEMBER FRIEDMAN: Second.

12 CHAIRPERSON FROINES: Well, we'll have to write a
13 motion, but we can --

14 PANEL MEMBER GLANTZ: The motion is that -- I'll
15 make it in a form of a specific motion, that all material
16 to be considered by the panel be in the panel's hands at
17 least five working days before a scheduled meeting.

18 CHAIRPERSON FROINES: And ten working days should
19 be submitted -- comments should be --

20 PANEL MEMBER GLANTZ: Okay, and it should be
21 submitted to the appropriate -- any public comment should
22 be submitted to the appropriate department ten working
23 days before the meeting to give the Department time to
24 prepare any necessary responses and get them to the panel
25 by five working days before the meeting.

1 CHAIRPERSON FROINES: Discussion?

2 Melanie, do you have something?

3 SUPERVISING TOXICOLOGIST MARTY: Just a comment.

4 If the comments are extensive, five working days is really
5 a short time frame to respond.

6 PANEL MEMBER GLANTZ: Well, let me amend my
7 motion slightly, that's to say any comments that are
8 submitted to the panel directly. I mean, there's also --
9 this is not meant to supplant the usually public comment
10 process associated with the documents.

11 CHAIRPERSON FROINES: I agree with Stan, and I
12 agree with your concerns. However, the difficult lengthy
13 comments, if we're going to get them less than five days,
14 that's even worse. I mean, we've made the matter -- we've
15 made the matter a greater problem rather than a lesser.

16 So I think the five days still would have to be
17 true for any comments that go to OEHHA or ARB. I don't
18 really want the panel to have less than at least five
19 days.

20 PANEL MEMBER FRIEDMAN: I think Melanie is
21 suggesting that they get more than five days for the
22 lengthy comments. Before our five day window, they may
23 need one time to reply.

24 CHAIRPERSON FROINES: Well, I think that they'll
25 have to communicate that to the public. That can't be

1 within our window, I don't think.

2 SUPERVISING TOXICOLOGIST MARTY: No, presumably
3 it would be a rare occurrence, because there would have
4 already been a public comment period on whatever document
5 was out there.

6 CHAIRPERSON FROINES: Well, I think that the
7 point is that if we need to set out rules that we can live
8 by, then we need to work with you to make sure we have an
9 adequate time for organizing meetings and for comment
10 periods and everything. And we can't put that in a
11 motion, obviously, because it's going to be situationally
12 determined.

13 But I think if we set out some very basic rules,
14 then everything else -- that serves as a basis for
15 subsequent activities.

16 So all in favor of the motion of Stan?

17 (Hands raised.)

18 CHAIRPERSON FROINES: The motion is unanimous.

19 See I'm improving.

20 So moving ahead.

21 SUPERVISING TOXICOLOGIST MARTY: We have --

22 CHAIRPERSON FROINES: Are there any other
23 administrative issues that anyone wants to raise before we
24 move on?

25 Okay, Melanie.

1 (Thereupon an overhead presentation was
2 presented as follows.)

3 SUPERVISING TOXICOLOGIST MARTY: We have a brief
4 presentation for the panel on the latest round of public
5 comments and our responses there to. And then we have a
6 few slides on some changes that we're planning to make to
7 the document, both in response to things brought up by the
8 panel and thing brought up during the comment period.

9 CHAIRPERSON FROINES: The other comment that I
10 want to make is I want to have the panel discuss the
11 findings today. And, in particular, some of the specific
12 points that were raised by Paul Blanc and Pete Witschi,
13 but I don't think that the findings are at a stage yet
14 where they can be voted upon -- and they are not at a
15 stage where they can be voted upon, in my view. I've made
16 some fairly major editorial changes, and I think that --

17 PANEL MEMBER GLANTZ: I really think we should
18 try to vote on them today. We can see, but I mean --
19 well, we'll get to that when we talk about it. I mean, I
20 haven't seen -- I mean, I was traveling, but I did get
21 everything by Email, and I think that the issues that I
22 saw flying around were more editorial than substantive.

23 I mean, I have a couple of changes I'd like to
24 propose in the findings too, but I think, you know, we
25 really -- we were supposed to have completed the process

1 by July 1st. I think we're substantively -- hopefully, we
2 will read substantive conclusion. And I think I would be
3 very disappointed if we couldn't vote the findings out
4 today.

5 If there's something wrong with them, then we
6 should fix it, but I just don't see -- I mean, they're
7 editorial, sort of, philosophical issues that have been
8 raised, but I don't think any of the stuff I saw would
9 affect what's on the list, which is the important point.

10 CHAIRPERSON FROINES: Well, I think that there
11 are, as far as I'm concerned, significant editorial
12 changes that need to occur to improve the quality of the
13 writing of the document, and if that could be considered
14 editorial and we can vote on a document. But I think
15 there are other changes that are going to occur that are
16 one substantive, and let's come to that point.

17 PANEL MEMBER GLANTZ: I mean, if we don't reach
18 consensus, we won't reach consensus. But I think the goal
19 should be to try to vote on the findings and finish the
20 process today.

21 CHAIRPERSON FROINES: Melanie.

22 SUPERVISING TOXICOLOGIST MARTY: The panel
23 received the responses to comments, so that was sent out
24 on the 23rd of July. And they have also been posted on
25 our web site.

1 We received 12 total letters commenting on one or
2 one of the following diesel exhaust particulate,
3 formaldehyde, acrolein, carbon disulfide, Phthalate esters
4 toluene and xylenes, methylene chloride and glycol ethers.

5 --o0o--

6 SUPERVISING TOXICOLOGIST MARTY: A majority of
7 the comments of substance were on diesel exhaust
8 particulate. We received comments from International
9 Truck and Engine Corporation and the American Trucking
10 Association.

11 What I'm doing is boiling down the comments to
12 the most substantive issues. There were other things I'm
13 not going to bring up, but the panel has them.

14 The comments from ATA and International indicated
15 that one severe effects should have taken priority. And
16 that things that were carcinogenic should have been first
17 to be listed. And they brought up Benzene, that Benzene
18 should be in Tier 1, because it is a carcinogen and
19 because of the level of risk in general ambient air. And
20 they also commented that diesel exhaust is not a
21 noncarcinogen.

22 --o0o--

23 SUPERVISING TOXICOLOGIST MARTY: Our response is
24 that OEHHA is still concerned about Benzene exposures to
25 children. However, there was not enough evidence to

1 is always an issue, but since the studies were done with
2 different levels and different mixtures of pollutants the
3 fact that they found an association with PM 10 means that
4 it's at least, in part, responsible.

5 And also I'd like to remind everybody that SB 25
6 requires us to consider the effects resulting from
7 multiple pollutant exposures so that even other components
8 of air pollution are involved in the effects that are
9 being measured on the respiratory tract that we would have
10 to consider that anyway, because none of us are exposed
11 just to one thing or the other.

12 --o0o--

13 SUPERVISING TOXICOLOGIST MARTY: There was
14 another comment letter with comments that were basically
15 similar in substance from the Western States Petroleum
16 Association. They did have an additional comment saying
17 that diesel exhaust particulate contains PAHs, but they
18 question the relevancy in terms of dose to the target
19 tissue, and noted that studies with extracts weren't
20 particularly relevant.

21 And our responses basically discussed the
22 bioavailability of Polycyclic Aromatic Hydrocarbons on
23 diesel exhaust particulate during the diesel TAC
24 identification process. There are studies of
25 occupationally exposed workers, where can you measure DNA

1 adducts with Polycyclic Aromatic Hydrocarbons in the
2 blood. And also animal studies which have shown DNA
3 adducts with PAHs following exposure to diesel exhaust.

4 --o0o--

5 CHAIRPERSON FROINES: Can I make a comment about
6 that. I think that we keep -- ever since the early
7 seventies, we've had this debate about bioavailability of
8 diesel particulate in the lung. And the data that you
9 cite demonstrates that there is some level of
10 bioavailability. Although, obviously there may be
11 involved in microphages and other lung constituents.

12 I think it's important to also understand,
13 however, that bioavailability is not an absolutely
14 criteria. That is, particles when they get into the lungs
15 stay there for a very long period of time. And we think
16 that reactive oxygen species are extremely important in
17 the toxicity associated with the lung.

18 And a particle in the lung with metals and
19 organics that -- and even carbon itself, carbon soot is a
20 very good electron transferring agent, as we know from
21 making aluminum using carbon electrodes in the aluminum
22 smelting business.

23 So that one has to take into consideration that
24 the particle deposited in the lung that can produce
25 reactive oxygen species has its own inherent toxicity that

1 needs to be considered mechanistically, and we keep
2 debating the bioavailability question without thinking
3 about the toxicity of the particle itself within the
4 context of its deposition in the lung.

5 And I think that we ought to develop some of
6 these notions a bit one because, I think, they are
7 important mechanistically, because I that we sometimes
8 tend to oversimplify and define, for example, a diesel
9 particle or a nondiesel particle as having toxicity only
10 because of the bioavailability of the constituency.

11 SUPERVISING TOXICOLOGIST MARTY: We got comments
12 from the NRDC. They were supportive of listing diesel
13 exhaust particulate, as a tier 1 TAC. They commented that
14 Benzene should have stayed in Tier 1 that the epidemiology
15 evidence of paternal and maternal exposure associated with
16 elevated leukemia incidents in the offspring was enough to
17 have it be in Tier 1.

18 And our responses, we are still concerned about
19 Benzene. We are concerned that it is a leukemogen, and
20 that children may be one sensitive to leukemogens, but at
21 this point the epidemiology data are relatively weak and
22 therefore we did not think it be longed in the first
23 listing of five.

24 CHAIRPERSON FROINES: Melanie, I think -- I want
25 to actually take comments after, so I shouldn't be jumping

1 in. But I think this issue of Benzene is one that really
2 does deserve -- Benzene is a known humanly leukemogens.
3 We all agree with that.

4 And so the question of whether or not children
5 are at increased risk of that leukemia from Benzene is one
6 that it seems to me that after this first tier one process
7 is over, that you folks should put some particular
8 attention to, because obviously it is a matter of
9 significant potential consequence and deserves really
10 careful review. And the issue of the pathology or the
11 type of leukemia is still a big question, Mark.

12 --o0o--

13 SUPERVISING TOXICOLOGIST MARTY: NRDC also
14 requested to evaluate 1,3-butadiene next time. It was one
15 that made it into our top 30 something to review in the
16 literature. And we do share concerns regarding
17 1,3-butadiene. It's a multi-site multi-species
18 carcinogen.

19 At this time, however we pulled up no evidence of
20 differential effects in the initial focus literature
21 review.

22 CHAIRPERSON FROINES: Of course, if you control
23 acrolein, you'll control butadiene.

24 --o0o--

25 SUPERVISING TOXICOLOGIST MARTY: We had one

1 report, which is different from what you're saying here.

2 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

3 SALMON: You're right.

4 SUPERVISING TOXICOLOGIST MARTY: What's the
5 Correct answer?

6 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

7 SALMON: We do have a small additional item of information
8 on the pesticidal use, which we are planning to include in
9 the final version of the report, which I will be
10 presenting to you very shortly. It's a very small item,
11 but it is there.

12 PANEL MEMBER GLANTZ: Okay.

13 SUPERVISING TOXICOLOGIST MARTY: We did have one
14 sentence already in the document talking about its use in
15 pesticidal -- as an herbicide and an algaecide and a
16 general microbiocide.

17 --o0o--

18 SUPERVISING TOXICOLOGIST MARTY: We got a request
19 from the American Chemistry Council to change the toxicity
20 summary title for glycol ethers and also one of the tables
21 in the document to indicate we really are talking about
22 EGEE, and EGME and their acetates. And that made sense to
23 us, so we made that change.

24 --o0o--

25 SUPERVISING TOXICOLOGIST MARTY: The ACC also

1 noted that there were 2 phthalate esters listed in
2 Appendix A, which is our total list of TACs and then the
3 list Of TACs that didn't make it any further and that they
4 are not TACs and we agree. We apologize for the error.
5 Several candidate TACs ended up on that list in Appendix A
6 and they have now been removed.

7 --o0o--

8 SUPERVISING TOXICOLOGIST MARTY: The American
9 Chemistry Council also commented on vinyl chloride noting
10 that the differential carcinogenic effects were uncertain
11 because of lower cytochrome p450 content in infants
12 especially.

13 And the logic there is that they would not have
14 as great an ability to activate the vinyl chloride to the
15 proximate carcinogen.

16 But our response is that the animal experiments
17 clearly demonstrate greater sensitivity of young animals
18 and especially very young animals, so it's the kind of
19 opposite of what you would think based on p450, and that
20 both toxicokinetic and toxicodynamic factors may be
21 involved. And in addition, even if the p450 activation is
22 lowered the detoxification may be even lower, and thus the
23 balance of activation in detoxification is really what's
24 important.

25 --o0o--

1 --o0o--

2 CHAIRPERSON FROINES: Would that be expected at
3 low dose?

4 SUPERVISING TOXICOLOGIST MARTY: I'm sorry I
5 didn't hear the question?

6 CHAIRPERSON FROINES: Would that be expected at
7 low dose?

8 PANEL MEMBER BLANC: That wasn't the argument
9 they were. They were making that no matter what the dose
10 is it's saturable, so they were answering the questions
11 that they raised. In fact, I think they were very unclear
12 in terms of what the basis of their criticisms were,
13 because, you know, it's one thing to argue that the
14 ambient exposures you could never get to level X, but they
15 made a series of arguments that the literature doesn't
16 support. So we could argue whatever it might be.

17 SUPERVISING TOXICOLOGIST MARTY: They also
18 mentioned that none of the criteria we used would support
19 putting methylene chloride in Tier 2. And our response is
20 that there's evidence of differential effects in the fetus
21 and infant.

22 CO is formed from the metabolism of methylene
23 chloride and it's bound with greater affinity to
24 hemoglobin. Also, infants are less able to disassociate
25 CO from carboxy hemoglobin. And fetal nervous tissue is

1 potentially one susceptible to the hypoxia thus generated.

2 That's it for slides on the comments. Are there
3 any comments which the panel would like to ask us about
4 our responses?

5 PANEL MEMBER BLANC: So you didn't feel there was
6 anything in terms of the carbon disulfide comments that
7 needed your comment here, other than your written
8 comments?

9 SUPERVISING TOXICOLOGIST MARTY: Correct. They
10 seemed to be pointing to a different document. The
11 information they're providing is not in here.

12 PANEL MEMBER BLANC: Relevant.

13 CHAIRPERSON FROINES: Gary.

14 PANEL MEMBER FRIEDMAN: No.

15 CHAIRPERSON FROINES: In one of the comments from
16 industry on formaldehyde they suggested that the National
17 Academy of Sciences has determined that formaldehyde
18 produces asthma.

19 SUPERVISING TOXICOLOGIST MARTY: I looked in the
20 NAS's book Clearing The Air, which talked about agents
21 that exacerbate asthma, particularly in indoor air. And
22 on their section of formaldehyde they do not come to that
23 conclusion.

24 CHAIRPERSON FROINES: That would have been
25 obviously a claim that the academy has found something

1 like it would be quite important. So I think that you
2 should have a written comment to that effect.

3 SUPERVISING TOXICOLOGIST MARTY: Okay.

4 CHAIRPERSON FROINES: Because if the NRC had
5 drawn that conclusion, then that would be fairly
6 substantial. Well, we'd be interested in the evidentiary
7 basis for it, but he would have to take it seriously,
8 obviously.

9 SUPERVISING TOXICOLOGIST MARTY: We have a few
10 slides on changes that we're making to the document. Andy
11 Salmon, will present that.

12 (Thereupon and overhead presentation was
13 presented as follows.)

14 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF
15 SALMON: I'd like to just briefly present to you the
16 changes which we have put together in a response firstly
17 to some comments by the panel at the last meeting, and
18 secondly some changes in response to the round of public
19 comments just received.

20 --o0o--

21 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF
22 SALMON: The comments I want to draw your attention to are
23 in several of the toxicity summaries. These are where the
24 changes that we have proposed for the final version of the
25 document are somewhat substantive.

1 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

2 SALMON: I don't believe that it's widely used as a
3 pesticide or herbicide on food crops, no.

4 --o0o--

5 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

6 SALMON: There was an additional study, which is now, in
7 fact, being published and which is being included in the
8 arsenic summary. This is supportive of the previous level
9 evidence, but we thought that it would be useful to
10 include this, since it's now appeared in the peer review
11 scientific literature.

12 CHAIRPERSON FROINES: I have a question, and
13 admittedly I have an arsenic bias as an investigator, so
14 I'll -- but it seems to me that this particular study is
15 quite important.

16 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

17 SALMON: Yes.

18 CHAIRPERSON FROINES: This is the kind of study
19 that could take something from a Tier 2 to a Tier 1 and.
20 So without putting -- well, I don't want to put you on the
21 spot, but basically this is -- what's your conclusion
22 about the significance of these findings relative to the
23 process we've been going through?

24 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

25 SALMON: Well, I think we were somewhat aware that this

1 evidence was in press, as you might say, before this
2 actual citation became public.

3 I don't know whether -- if you want to talk about
4 the significance of this particular finding in one detail.

5 Well, the first issue, of course, this is a
6 drinking water study not an air study, so it's highly
7 interesting and important, but not absolutely central to
8 our current concerns, but it certainly does -- it supports
9 the conclusions which we reached with the earlier
10 analysis.

11 And so, yes. And that's --

12 SUPERVISING TOXICOLOGIST MARTY: These were
13 considerably larger exposures than routinely encountered
14 in air.

15 PANEL MEMBER BLANC: I think, John, the
16 discussion with arsenic paralleled the discussion relative
17 to another heavy metal in terms of the proportion of
18 airborne pockets to the total burden of exposure.

19 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF
20 SALMON: There's a relationship, for instance, the mercury
21 situation, certainly.

22 PANEL MEMBER BLANC: Yeah. And so I think that
23 if you look at it in those two categories we talked about
24 one of which had to do with the body of scientific
25 evidence and the other had biological plausibility and

1 different methods of study. And the second was related to
2 the probability of airborne exposure and the relative
3 contribution of airborne exposure to total body burden.

4 Then I think that's why it was solidly in Tier 2,
5 but I think in the end it was in Tier 1. And I think
6 that's also true of mercury, so they were very parallel.

7 SUPERVISING TOXICOLOGIST MARTY: Yes.

8 CHAIRPERSON FROINES: I think, you know, one of
9 the things that characterizes this entire process, and it
10 needs to be said, and I'm glad to have a chance to put it
11 on the record, is that we're dealing with really
12 inadequate databases to a large degree. Studies haven't
13 done to look at these kinds of questions, and so we are
14 constantly struggling to find adequate and sufficient
15 information to draw conclusions from.

16 And I think that's important to say. It seems to
17 me that where you find good data, then you have to grab
18 it, but I think Paul's point is well taken. The exposure
19 to arsenic to airborne arsenic is vanishingly small. And
20 clearly the key issue with arsenic, at this point, is
21 drinking water. And so let's leave it at that.

22 It's an important issue. And one of which, as
23 data develops overtime, I think this panel would be
24 interested in hearing is, as you update the information,
25 because I think as we learn one about differences, then

1 that will be helpful precisely because of the limitations
2 that we're all operating with.

3 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

4 SALMON: Okay. In response to the panel's request for one
5 information on sources of exposure to dioxin, we have
6 included some further details, particularly on proportion
7 of new emissions to air, water and land.

8 We have included in the summary a table provided
9 by US EPA, which is firstly a table of emissions estimates
10 for specific source types. And this includes relative
11 emissions for gasoline and diesel-fueled vehicles.

12 Interestingly enough, the diesel-fueled vehicles
13 appear to be responsible for about five times the amount
14 of dioxin that is produced by the gasoline fueled vehicles
15 in this particular inventory.

16 We also gave one details on actual emissions by
17 providing the updated air emissions table by county in
18 California. One of the interesting features of this is,
19 that, in fact, Sacramento now the beats Los Angeles for
20 dioxin emissions.

21 --o0o--

22 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

23 SALMON: We also included a description and graphical
24 presentation of where the dioxin input to the human food
25 supply comes from. This basically represents a synthesis

1 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

2 SALMON: Numerous combustion sources as detailed in the
3 emissions inventory table, which I referred to, which we
4 included in the updated version of the report. But
5 combustion sources are universally where it's coming from.
6 Incinerators are still somewhat important, although of
7 less importance now than in the previous version of the
8 inventory, because of the improved controls and reduced
9 number. There's substantial input from various other
10 sources.

11 CHAIRPERSON FROINES: Do we get one follow up on
12 Gary's questions, do we get one from across our borders
13 than from within our borders?

14 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

15 SALMON: I don't know the exact answer to that, at this
16 point. I think that one of the issues, which the US EPA,
17 the Air Board, the air districts are currently working on
18 is to actually serve the various ways that dioxin moves
19 around.

20 I think there's a suggestion that quite a lot of
21 the material you're seeing is of relatively local origin,
22 but I don't have a good quantitative answer for that at
23 this point. And, in fact, you know, this is something
24 they're working on, so I will have to report to you later
25 on that one.

1 --o0o--

2 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF

3 SALMON: On the glycol ethers toxicity summary, we wanted
4 to clarify the wording to make it clear that it was EGEE
5 and the acetates and EGME and the acetate that we are
6 concerned about.

7 However, it is in the actual listing, the TAC
8 which is listed is glycol ethers, and so we can't ignore
9 the existence of the others. We also have a concern that
10 some of the unspciated glycol ether emissions listed in
11 the hotspots program probably do contain these materials.

12 That's the extent of the specific changes that we
13 proposed for the final document.

14 PANEL MEMBER BLANC: Did you want to say
15 something for the record about just some of the technical
16 corrections to the document, in terms of some unintended
17 errors of collation that occurred. I mean, I just think
18 technically for the record you should state what the
19 corrections are in terms of that.

20 SUPERVISING TOXICOLOGIST MARTY: Is this having
21 two diesel summaries?

22 PANEL MEMBER BLANC: For example there were two
23 diesel summaries, and there was another summary that was
24 misplaced in order. And I think you should simply state
25 for the record that those were collation errors that will

1 be corrected in the final document.

2 SUPERVISING TOXICOLOGIST MARTY: Those were
3 collation errors and the public didn't see those collation
4 errors because they're looking at the document on the web
5 site. So, yes, some people got two diesel exhaust
6 summaries and some people got two manganese summaries, one
7 in Appendix C1 and one in Appendix C2, so we apologize for
8 that.

9 CHAIRPERSON FROINES: Melanie, Tony Fucaloro
10 submitted comments to you. And for the record, can you
11 respond to how you addressed his comments.

12 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF
13 SALMON: We basically were making the changes as
14 requested. In particular, the structure for carbon
15 disulfide is being amended to something that's legible.
16 The word, the description of univalent mercury has been
17 amended to follow the recommended practice.

18 And so --

19 SUPERVISING TOXICOLOGIST MARTY: Tony's comment
20 that there is actually 37 not 36 TACs that we did
21 literature searches I finally realized it's because we
22 ended up putting lead on the list which we had just
23 previously looked at during the criteria or pollutant
24 prioritization, but everybody decided should really not be
25 dealt with under criteria or pollutants, because it's a

1 toxics issue.

2 Dr. Fucaloro asked that we explain that
3 somewhere, so I'm going to put in a sentence explaining
4 that.

5 CHAIRPERSON FROINES: And for the sake of the
6 record, just that in the actual notice of the public
7 meeting, you'll notice that organic lead and lead
8 compounds is listed and with the parenthesis organic and
9 inorganic, so that everybody at least on the panel knows
10 we did not take up organic lead on this panel.

11 It was, in fact -- that was the way it was listed
12 when the Clean Air Act amendments of 1990 were passed and
13 the hazardous air pollutants were identified. And in that
14 regard that's why also on the notice of public meeting
15 Polycyclic Organic Matter was listed and not PAHs. In
16 fact, Polycyclic Organic Matter is, in fact, what would be
17 designated as under Tier 1 not PAHs.

18 SUPERVISING TOXICOLOGIST MARTY: Correct.

19 CHAIRPERSON FROINES: And so I think that is the
20 only changes there, unless I'm mistaken.

21 SUPERVISING TOXICOLOGIST MARTY: I think dioxins
22 had a specific wording that was different. We were just
23 calling them dioxins. It's chlorinated dioxins and
24 dibenzo furans. That's how it's listed as a TAC.

25 CHAIRPERSON FROINES: And does that mean that

1 PCBs are no longer listed?

2 SUPERVISING TOXICOLOGIST MARTY: Well, this gets
3 into a somewhat difficult issue. Since PCBs are listed
4 separately as a TAC, we're not sure now that we can list
5 dioxins and the dioxin-like PCBs.

6 On the other hand, in terms of strategies for
7 control, its's really the dibenzo and dioxins and dibenzo
8 furans that you can target, because while PCBs are made in
9 little tiny amounts during some combustion processes,
10 what's out there is really a reservoir from past use in a
11 lot of different industrial areas.

12 CHAIRPERSON FROINES: So PCBs cannot be listed,
13 because that would mean you'd be identifying six
14 chemicals.

15 SUPERVISING TOXICOLOGIST MARTY: That's what
16 we're concerned about.

17 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF
18 SALMON: One of the approaches, which we hope to bring
19 before the panel to slightly resolve this issue, is that
20 the toxic air contaminant program may wish to consider
21 updating to the new WHOTEF table, which resolves the issue
22 by defining the dioxin like compounds, which would be the
23 subject of the listing as including the chlorinated
24 dibenzo furans and dioxins, and also those PCB items,
25 which have dioxin like effects i.e. the coplanar isomers.

1 But that's something which we would have to bring
2 before the panel as a separate item, at a later date in
3 order to clear up the situation in a straightforward way.

4 SUPERVISING TOXICOLOGIST MARTY: George just
5 remind that our legal counsel and ARB's legal counsel are
6 the ones that are concerned about listing six rather than
7 five. So, at this point, the plan is to, for the moment,
8 ignore the dioxin like PCBs in terms of listing.

9 PANEL MEMBER GLANTZ: Those would go into Tier 2,
10 is that you're saying?

11 SUPERVISING TOXICOLOGIST MARTY: I hadn't thought
12 about that where to put it. George is saying the answer
13 is yes.

14 PANEL MEMBER GLANTZ: The answer is yes, so that
15 would be split. Those two would be split and the PCBs
16 would go into Tier 2.

17 SUPERVISING TOXICOLOGIST MARTY: They're not a
18 huge airborne issue anyway.

19 CHAIRPERSON FROINES: Can I just ask an
20 informational question. It is not the role of this panel
21 to comment on legislation, so I won't do that, although
22 one could think about other legislation. But when is the
23 next date for chemicals coming to this panel that would go
24 beyond the five?

25 PANEL MEMBER GLANTZ: Monday.

1 (Laughter.)

2 SUPERVISING TOXICOLOGIST MARTY: The statute is
3 not entirely clear on that. It does say we must update it
4 by July 1st, 2005.

5 CHAIRPERSON FROINES: You must update it by 2005.
6 Does that preclude you from updating in 2003 or
7 04?

8 SUPERVISING TOXICOLOGIST MARTY: We don't think
9 it does.

10 PANEL MEMBER FRIEDMAN: Does updating mean if you
11 add one to the five you have to take one away.

12 SUPERVISING TOXICOLOGIST MARTY: No, it means
13 adding additional compounds to the list.

14 PANEL MEMBER GLANTZ: Yeah. I was looking at
15 this and basically we have to identify five by July 1st,
16 and then the list has to be updated by the this other
17 date. But it can be updated before that. And as I read
18 it, there's no limit on how many you can add, is there?

19 AIR TOXICOLOGY AND RISK ASSESSMENT UNIT CHIEF
20 SALMON: I think we might have to consult our counsel to
21 get the fine points on that.

22 PANEL MEMBER GLANTZ: But in terms of today's
23 actions, if we act -- oh, wait, it says here beginning
24 July 1st 2004, the office shall annually evaluate at least
25 15 compounds.

1 CHAIRPERSON FROINES: So that -- in a sense,
2 nothing would come back to this panel before 2004?

3 PANEL MEMBER GLANTZ: No. If OEHHA wanted to
4 bring it back, if they wanted to bring additional things
5 back to us before that, they could.

6 PANEL MEMBER BLANC: And that --

7 SUPERVISING TOXICOLOGIST MARTY: It --

8 PANEL MEMBER GLANTZ: It just says it has to be
9 done by than.

10 PANEL MEMBER BLANC: I notice the section on PAHs
11 doesn't seem to have Section 6 conclusion. Is that a --

12 SUPERVISING TOXICOLOGIST MARTY: I don't know
13 why.

14 PANEL MEMBER BLANC: Maybe I just missed it,
15 because there's a bunch of tables too.

16 SUPERVISING TOXICOLOGIST MARTY: Well, we'll have
17 to correct that so that they're all laid out in the same
18 manner.

19 PANEL MEMBER BLANC: Another technical correction
20 or editorial suggestion you might want to do for the
21 final, final is some of the Tier 2 discussions end with a
22 phrase saying that this has been designated Tier 2, but
23 that we may revisit this as the other data emerge, with
24 slight variations and then some of them don't say it.

25 It seems to me we'd be probably better if that

1 phrase were included in each conclusion, otherwise the
2 inferences that some of them were open to reassessment and
3 some them aren't, which I know isn't your intention.

4 SUPERVISING TOXICOLOGIST MARTY: That's all we
5 had.

6 CHAIRPERSON FROINES: Would you answer one
7 further question. What you do now is having selected
8 five, do you then go look at those five in terms of -- are
9 you required to look at those five in terms of changing
10 their -- looking at their risk assessment values within
11 the context of these -- of the scientific considerations.

12 SUPERVISING TOXICOLOGIST MARTY: The statute does
13 not require us to do that, interestingly enough. It just
14 requires ARB to revisit their ATCMs or develop a new one
15 if there is not one that exists.

16 CHAIRPERSON FROINES: Because I think that for
17 many of these compounds, for one reason or another that a
18 reevaluation of risk assessment would not necessarily
19 prove fruitful. I think, for example, with lead that we
20 already know it's -- we already treat it as a no threshold
21 compound. So setting standards below a no threshold
22 doesn't -- it makes it unclear.

23 And I do want to say that because there's been so
24 much controversy surrounding the diesel issue, that as far
25 as I'm concerned the asthma affects the allergic airway

1 disease effects, the evidence is -- certainly, there is a
2 lot of research that's developing, and that I think that
3 research is important. In fact, we're doing some of it
4 ourselves.

5 But I think that if you look at the dynamic
6 between a research phase and a regulatory phase with
7 respect to the asthma and immunologic effects, I think
8 we're still in the research phase with respect to diesel.
9 And so I don't think that the current level of research
10 would lend itself to new risk assessments or new risk
11 management strategies. I think that we need to play out,
12 if you will, the research on diesel and let that emerge
13 over time, as opposed to seeing in the context of a new
14 risk assessment or a new risk management strategy.

15 And so I think that looking at these chemicals,
16 whether it be lead on one hand or diesel on the other or
17 acrolein as well, that one needs to look at the adequacy
18 of the science, both in terms of the science, but also
19 whether or not you could go forward in any kind of risk
20 assessment manner that would be -- and I think that's a
21 different level of evidence that we're talking about, in
22 terms of the weight of the evidence.

23 So it seems to me that the next steps are
24 required at some level of different level of evidence, as
25 we think about going forward.

1 Stan.

2 We're out of a quorum.

3 Go ahead.

4 PANEL MEMBER GLANTZ: Well, I just wanted to, in
5 the interests of trying to move things along, I think that
6 we can't take an action till Hanspeter gets pack, but I
7 think that we ought to accept this report subject to a
8 final review by the Chair and the -- I think there's two
9 lead people, I think it's me and Hanspeter to look over
10 the final, final changes one last time.

11 But I think, at this point -- and I have a few
12 I've marked up here that I don't think is worth the
13 panel's time to go through. They're all just editorial.
14 I'd like to -- I think we ought to accept it with the one
15 substantive change being that dioxin-like PCBs be
16 separated from dioxins and moved to Tier 2 as a separate
17 item. And I would -- and, you know, that, to me, that's
18 the one substantive change that, based on the discussion
19 now and that we not have to bring this back to another
20 meeting, unless somebody has some major substantive issues
21 that they think need to be discussed that I haven't heard
22 any from anybody.

23 PANEL MEMBER FRIEDMAN: I just have a question,
24 if we do vote to accept that report, does that mean we're
25 accepting our findings too, because I have some suggested

1 changes.

2 PANEL MEMBER GLANTZ: Well, then we'll deal with
3 the findings separately.

4 CHAIRPERSON FROINES: Here's what we're going to
5 do. We can take up Stan's point right now in terms of the
6 report. And then I want to take a break, and then I want
7 to come back and have a discussion about the findings,
8 because that's a different discussion from the report.

9 I do want to say and maybe Jim can help me and
10 Bill can help me at the break, but that the language I
11 think that we would be adopting in terms of the report
12 would be that we, the panel, has reviewed the report and
13 that the panel finds that the, what's the term -- there's
14 the specific language I'm looking for here.

15 MR. BEHRMANN: The language in the statute is
16 that the panel -- it's actually stated as a negative, if
17 the panel finds the report is not based upon sound
18 science, you would return the report to the agency for
19 revisions.

20 So what we've done and what the panel has done in
21 the past is you have reviewed the report and found that it
22 rents sound science.

23 CHAIRPERSON FROINES: So that would be the
24 motion. We don't really adopt reports. We have a finding
25 that they represent sound science.

1 PANEL MEMBER GLANTZ: Yeah. I kind of don't like
2 that term, because Phillip-Morris invented it, but the --

3 (Laughter.)

4 CHAIRPERSON FROINES: It's what's in the law.

5 PANEL MEMBER GLANTZ: The law -- well, whatever.

6 MR. BEHRMANN: To be even more specific --

7 PANEL MEMBER GLANTZ: I though it was that it
8 wasn't seriously deficient is that --

9 CHAIRPERSON FROINES: We're not doing -- we're
10 not finding TACs here.

11 MR. BEHRMANN: Right. And to be even more
12 specific, the wording that you've used in the past
13 findings are that you agree with the science that's
14 presented in the report.

15 PANEL MEMBER GLANTZ: Okay. Well, now that we
16 have a quorum back, I'd like to move --

17 CHAIRPERSON FROINES: Well, thanks, Jim.

18 Go ahead, Stan.

19 PANEL MEMBER GLANTZ: I would like to move that
20 the scientific review panel accept the report and agree
21 that the scientific content is acceptable, that with the
22 one substantive change the dioxin-like PCBs be separated
23 from dioxins and moved to Tier 2, and that after OEHHA has
24 come up with the final report, which makes all of the
25 necessary editorial adjustments that have been suggested

1 by the panel, that it be reviewed one last time by the
2 Chair and the leads on behalf of the panel.

3 CHAIRPERSON FROINES: Well, why don't you make --
4 let's assume that most of that we can agree upon in a
5 gentleman's agreement and that we want a specifically
6 almost, one sentence, motion.

7 PANEL MEMBER GLANTZ: Okay, then my one sentence.

8 CHAIRPERSON FROINES: We'll agree to all of that.

9 PANEL MEMBER GLANTZ: Okay. Let me withdraw my
10 motion. I would like to move that the panel vote that the
11 OEHHA report is acceptable and based on sound science with
12 the one substantive change being the dioxin-like PCBs are
13 separated from dioxins and move to Tier 2 pursuant to the
14 earlier discussion.

15 CHAIRPERSON FROINES: I would make a friendly
16 amendment to say that the panel, because you don't say
17 that we've viewed it. I'd like us to say that the panel
18 has reviewed the report and accepts it as having sound
19 science.

20 PANEL MEMBER GLANTZ: Okay.

21 CHAIRPERSON FROINES: I just want to make sure
22 that we state that we've actually reviewed the report.

23 PANEL MEMBER GLANTZ: That's acceptable to me.

24 CHAIRPERSON FROINES: Discussion?

25 PANEL MEMBER GLANTZ: You need a second?

1 PANEL MEMBER FRIEDMAN: Second.

2 CHAIRPERSON FROINES: Discussion?

3 All in favor?

4 (Hands raised.)

5 CHAIRPERSON FROINES: The vote is unanimous.

6 Let's take a 15-minute break and then we'll get started on
7 the findings.

8 (Thereupon a brief recess was taken.)

9 CHAIRPERSON FROINES: I don't know if we're going
10 to need somebody from the agency, but you might as well
11 sit there for a moment anyway. Can we reconvene? Is
12 everybody ready.

13 PANEL MEMBER GLANTZ: Can we get a copy of the
14 draft finding. Do you have any, Peter?

15 Does anybody else need copies?

16 PANEL MEMBER WITSCHI: Yeah, I've got it.

17 CHAIRPERSON FROINES: Paul?

18 Okay. The next phase is to consider the draft
19 findings. And, at this point, I have comments from Peter
20 and then Paul, and so it seems to me that we should start
21 out and discuss Paul's and Peter's comments. So Peter, do
22 you want to start?

23 PANEL MEMBER WITSCHI: Yeah. I thought they
24 pretty much reflected what we had discuss. And what I had
25 suggested they're really some statements I made with the

1 potential Impact Of this document in mind. I thought it
2 was a bit too long.

3 And first of all, and there were a few things, in
4 my opinion, that were missing. One of them is we really
5 should spell out the criteria by which we evaluate those
6 compounds, because it's a combination of toxic potential
7 and potential for exposure. And I think to get this
8 across in an unambiguous way would be important, then I
9 have no problem with the five compounds as listed.

10 And then, again, and this a rather impact
11 consideration. Really, I think, after we've come to the
12 conclusion of which five compounds we've listed, then I
13 think we should come out and say make this thing about the
14 impact of environmental tobacco smoke, which still, in my
15 opinion, is much, much bigger than all the other five
16 compounds combined.

17 And the last one I had was the second tier
18 compounds. I would be in favor of only the list of names
19 and not necessarily provide detailed descriptions why they
20 are there. This could be in the next document. The
21 reason I think this might be an appropriate way to do it
22 is because if we list all of their concerned about the
23 secondary tiers, then the document, again, can be second
24 guessed, because of neurotoxicity is one compound, why
25 shouldn't neurotoxicity, this carbon disulfide be less

1 important than neurotoxicity is one of the primary
2 compounds in these kind of things.

3 It's not that anything -- I found anything wrong
4 with what's there, I just thought we could do with less.

5 CHAIRPERSON FROINES: So he's suggesting three
6 changes. One is a listing of the criteria for
7 identification. Second is to further emphasize
8 environmental tobacco smoke. Three, approach the Tier 2
9 by listing of names and avoid actually the list of the
10 rational. So, discussion?

11 PANEL MEMBER FRIEDMAN: The rational in here is
12 pretty much a repetition of the report from OEHHA, in
13 which case we could just reference that and shorten it the
14 way you suggested it. I think if it were shorter, it
15 would have more impact. I agree with that.

16 PANEL MEMBER BLANC: Well, I come at somewhere in
17 between. I think that the problem here is not the length
18 per se, in either discussing the Tier 1 or the Tier 2, but
19 I think the problem is what is said in the length, because
20 it misses a little bit of the key role that we have in
21 terms of the scientific review.

22 And therefore, I think that the findings would be
23 more useful if they emphasized the ways in which the data
24 arose or didn't rise from a scientific point of view.
25 And, for example, I don't think it's necessary to provide

1 a level of detail where we say there was scientific --
2 there were scientific papers, which showed that in
3 children lead causes neurotoxicity without a threshold.

4 I think what's more useful would be to make a
5 generic comment, which would be that there were reasonable
6 and multiple epidemiologic studies presented specific to
7 children, period or specific to neurotoxicity in children.

8 I think that this -- that the findings would be
9 shorter and pithier if they were more generic, if they
10 discussed more generically or pointed out the reasons why
11 the data were scientifically reasonable or were
12 scientifically reasonable to draw conclusions
13 systematically from the data.

14 But I would actually like to see some of that
15 mentioned for the Tier 2 as well, and maybe that would
16 solve the problem that you mentioned, which is that if you
17 start going on and on about the neurotoxicity in children
18 in three different studies, and, you know, of manganese
19 and the level of detail that's there, then you're right,
20 it does raise the question of well, then why is it here and
21 not there?

22 This comes back to my earlier suggestion to OEHHA
23 that they actually structure conclusions in each section
24 of their document, which make it explicit that here was a
25 chemical for which there were good animal data, but poor

1 epidemiologic data and for which exposure data were based
2 on potential hotspots and not ambient air pollutants.

3 Some way of summarizing those two axis, which
4 doesn't really come across consistently in the document.
5 And therefore, I think we would be obliged to do it
6 ourselves.

7 PANEL MEMBER WITSCHI: So if I understand you
8 correctly then, we could deal with the Tier 2 compounds,
9 each one with maybe two or three sentences.

10 PANEL MEMBER BLANC: That's correct. And I
11 actually think that it doesn't take much more for the Tier
12 one either, because I think we don't have emphasize what
13 really should be in. If you look at the confusion which
14 seemed to arise in some of the public comment, I think it
15 was related to questions as to what is the consistent --
16 was this process consistent among chemicals, and how are
17 we to understand the weighting of neurotoxicity as
18 compared to carcinogenesis, et cetera.

19 PANEL MEMBER WITSCHI: Yeah, I would agree with
20 that one, you know, because I felt this document has to be
21 decisive. It reflects a lot of work and it reflects a lot
22 of deliberations.

23 And the way I perceived it, when I read it, it
24 still was like some of or deliberations in places almost
25 waffling.

1 CHAIRPERSON FROINES: Almost what?

2 PANEL MEMBER WITSCHI: Waffling. In my opinion,
3 this is a very important document, and the result of a
4 long intensive and prolonged process. And it's really
5 time to be decisive in that one and get across that's the
6 way -- that's what we concluded.

7 CHAIRPERSON FROINES: Well, I have one problem
8 with what the two of you, I think, are saying. I think
9 the public has a right to know pardon the use of that,
10 sort of, archaic expression, but the public does benefit
11 if we say manganese and say the basis of why it is in Tier
12 2 is neurotoxicity. I think to leave that out means --

13 PANEL MEMBER BLANC: That wasn't my suggestion.

14 CHAIRPERSON FROINES: It's his suggestion, and
15 I --

16 PANEL MEMBER BLANC: No, I think he is agreeing
17 with me in the end.

18 PANEL MEMBER GLANTZ: Can I say something. I
19 think there's a consensus here. And, I mean, I had
20 reviewed these before they were sent out to the panel.
21 And my reaction on reading it frankly was that it was kind
22 of verbose, so I agree with that, but I just didn't want
23 to rewrite it.

24 (Laughter.)

25 CHAIRPERSON FROINES: The question is --

1 PANEL MEMBER BLANC: Stanley, I thought you
2 had -- Stan, I thought you had written it originally.

3 PANEL MEMBER GLANTZ: Well, I worked this out
4 wording with the staff. They drafted it and I suggested
5 some changes and it went back and forth.

6 PANEL MEMBER BLANC: Well, I think that that is
7 reflective.

8 PANEL MEMBER GLANTZ: Well, I have one sort of
9 semi-substantive change I'd like to just throw on.

10 I actually think that if -- well, my -- I think
11 we need to adopt the findings today.

12 CHAIRPERSON FROINES: Stan, we're not going to
13 adopt the findings today. We cannot adopt findings --
14 have you heard this discussion. This is going to require
15 major changes in the document.

16 PANEL MEMBER GLANTZ: No. Well, then if that's
17 the case, then I think we just do what the law says and
18 adopt the list. I mean, we don't have to write a little
19 paragraph about each one of these compounds if we don't
20 want to.

21 PANEL MEMBER WITSCHI: You know, Stan, why don't
22 you just I didn't not have the time to short and concise.

23 CHAIRPERSON FROINES: Well, wait a second.

24 PANEL MEMBER GLANTZ: Can I get to my one sort of
25 semi-substantive suggestion.

1 CHAIRPERSON FROINES: All right, go ahead.

2 PANEL MEMBER GLANTZ: Which is, I think if you
3 look at the way the Tier 2 is done, it's currently number
4 7. And it says, "The panel also finds there are other
5 toxic contaminants of concern, and then it lists them, and
6 then there's an A, B, C, D up to however many letters
7 there are and they're alphabetical. And the indentation
8 is backwards because I couldn't figure out how to get Word
9 to do what I wanted.

10 But what I think we should do is we should
11 organize the Tier 1 in the same way. I think the 5
12 chemicals that the panel -- and probably rather than
13 recommend it should say concurs with OEHHA and listing his
14 toxic air contaminants that may cause infants and children
15 to be susceptible to illness, and then list them
16 alphabetically and then take the remaining -- take the
17 five and reorder the things as subsections alphabetically,
18 because one of the things that came out, and I can't
19 remember if it was in the Email back and forth between the
20 panel members or the public comments, but some people were
21 taking this listing as a priority listing in terms of
22 severity of effects.

23 And I don't think anybody intended that. So I
24 think we want to just put them in alphabetical order, make
25 it clear that they're in alphabetical order. And that's a

1 sort of substantive change --

2 CHAIRPERSON FROINES: That's good.

3 PANEL MEMBER GLANTZ: -- which I would suggest.

4 And in terms of the -- I mean, I'm comfortable with the
5 wording more or less the way it is now, but I think if
6 people want -- I know you had some specific editorial
7 changes. What I would suggest we try to do is if people
8 are in agreement that we want to try to shorten these and
9 make them more concise, that we take a break and try to do
10 it and then get Peter to Xerox them, look at them and vote
11 on it.

12 I don't hear anything substantive being said.
13 It's a matter of presentation. Or I'd be willing to let
14 the Chair have the authority to do a circulated draft.

15 PANEL MEMBER BLANC: Well --

16 PANEL MEMBER GLANTZ: Unless somebody has a
17 substantive problem.

18 PANEL MEMBER BLANC: Well, but Stan, I think
19 you're confusing me a bit, because I understood the
20 resolution that you proposed earlier that was adopted to
21 put the panel on record as having found the record to be
22 scientifically sound, fulfilled our immediate need to put
23 on the record a formal approval of the document consistent
24 with the timeframe that we -- time constraints that we've
25 been working in.

1 Therefore I don't see the pressing need to have
2 the supplemental findings approved linguistically today,
3 because we've done the key time dependent thing that we
4 needed to do.

5 And further more, I think it could be counter
6 productive, because the way in which, I think, the panel
7 can be most useful ultimately to OEHHA in terms of
8 documentation and feedback and oversight is to provide the
9 strongest possible written record of findings. And the
10 impression, if not the substance, of being cavalier would
11 be --

12 PANEL MEMBER GLANTZ: Well, no. I'm not talking
13 about being cavalier. It's just we're not going to
14 have -- we don't have another meeting until October. And
15 I just think we should -- I mean, I haven't heard any
16 substantive controversy about what's in here. And I think
17 that we should either -- and this is not being cavalier.
18 It's being efficient. I think that we could either
19 take -- I mean take a break -- I mean, I'm happy with them
20 more or less more the way they are. But we could take a
21 break and try to edit them down a bit and then get them
22 copied and let an look at them and make sure they're
23 comfortable or I would be also happy to let the Chair, as
24 we've done many other times, you know, take something and
25 make whatever editorial not substantive, but editorial

1 changes are appropriate and just circulate it to the panel
2 and then sign them based on a vote today, but I just don't
3 think -- I don't see what we gain by putting this off till
4 October, which is what you would be doing.

5 CHAIRPERSON FROINES: Well, let me just make a
6 couple comments.

7 I think the important point is that the point
8 that Paul made, which is in terms of the July 1 date and
9 the listing of five compounds, that's been accomplished.
10 I mean, when we approved the last motion, we gave Joan
11 what she needed, basically, from this panel. We could
12 send her our findings a year from now and it wouldn't
13 change anything. It is a statement from this panel about
14 the way we saw this process. And so there is no time
15 problem.

16 I do think, however, that when we do send the
17 findings they should be carefully crafted and that we
18 should not rush to judgment on a draft document because we
19 would like it off our plate. And I think that's what's
20 happening a little bit, because the comments that Peter
21 made about criteria for identification, writing more about
22 tobacco smoke and the comments from Paul about explicit
23 statement or statements about the process, there's
24 absolutely no way we can put that in this document and not
25 have the public have a chance to not have to have us see

1 that and vote in a public forum to approve it. We can't
2 approve -- those are major, fairly major --

3 PANEL MEMBER GLANTZ: Well, I --

4 CHAIRPERSON FROINES: Excuse me, let me finish.
5 I waited for you and now you wait for me. That these
6 changes are not trivial, and that we can't vote for a
7 document that's going to have relatively significant
8 changes from a legal standpoint and then -- and not have a
9 public meeting to vote on those changes. I simply won't
10 entertain a motion to that effect. We can't put ourselves
11 in that position. We need to have a thoughtful process
12 when we're making changes.

13 PANEL MEMBER GLANTZ: Well, except I don't see --
14 first of all, I actually, at the risk of destroying my
15 reputation, don't think we should say anymore than it
16 already says about tobacco smoke. I think it says plenty.
17 And it's not -- I mean, I think that point has been made.

18 But again, I think that what we're talking about
19 here are matters of presentation --

20 CHAIRPERSON FROINES: No, it's not.

21 PANEL MEMBER GLANTZ: -- not matters of
22 substance.

23 CHAIRPERSON FROINES: Stan, you want it to be
24 that, but it's not. These are substantive changes.

25 Let me just make a point.

1 PANEL MEMBER GLANTZ: Well, I don't --

2 CHAIRPERSON FROINES: Excuse me. People kept
3 saying there's nothing substantive. Well, I can show you
4 major rewrites that I have done to this document, like so,
5 that therefore make it mean that it has to come back to
6 this panel. It cannot go forward without this panel
7 having a chance to look at those comments and be voted
8 upon. It simply can't. There are too many substantive
9 changes that are going to be made to say we'll approve it
10 today, but we won't therefore -- and we'll make These
11 editorial changes and we'll forget about it, it won't go
12 flow.

13 PANEL MEMBER GLANTZ: Well, then what I'm saying
14 then Jon, because we've discussed the -- we've discuss the
15 report of the report at great length.

16 What I would then suggest if you think the
17 changes in the language that you think are necessary would
18 be substantive, and you've already written them down, I
19 think that the thing to do would be to take a break,
20 integrate all of the substantive changes people think are
21 appropriate into it get them copied, distribute them and
22 then go through them, I mean in the public meeting and see
23 if we can't come to a consensus.

24 CHAIRPERSON FROINES: I'm sorry, unless -- you
25 want to do that that's fine, but I would take me 2 or 3

1 hours to bring this document to a place where I think it's
2 ready for review and I don't think that's going to happen
3 today.

4 PANEL MEMBER BLANC: You know, it may partly be
5 semantical, you know, what you say about not substantive
6 and what are people talking about. I think the reason
7 that you said there's no substantive change is that
8 there's certainly not going to be anything in our findings
9 which are going to say that we don't think something which
10 is Tier 1 should be Tier 2 or something which is Tier 2
11 should be Tier 1 or a change of that nature or a
12 declaration that we, you know, that, in fact, we do want
13 to list a pesticide even though the laws says we can't or
14 something like that.

15 So, yes, nobody is saying that there's that, but
16 we've taken care of that substantive issue through a
17 resolution, which essentially approves the document.

18 What I'm concerned about is that six months or a
19 year from now when we're -- you know, want to be able to
20 point to the written record, which fills in some of the
21 holes that are still left in this document, because of the
22 time constraints that the agency was under, that there are
23 vulnerabilities which are probably unnecessary.

24 And we actually have the luxury of not having the
25 same time constraint. And even though it may be several

1 months from now till we actually meet face to face and
2 would, you know, approve a final worded document. I think
3 that the gains outweigh the loss. And, again, to return
4 to the same issue, because this document is implicit but
5 not explicit in the weighting of the evidence and the
6 summaries section at the end of each chapter, if you will,
7 or each chemical discussion are not consistent in their
8 structural or their wording, it presents a real
9 vulnerability that I think we can address if we're
10 careful.

11 So I would define that as being substantive not
12 because we're going to move something from one place to
13 another, because we can't -- we wouldn't do that anyway,
14 because we've just approved the document.

15 But it is substantive in that it's a different
16 substantive approach to what we'd be trying to accomplish
17 with the findings, because I think -- we don't help very
18 much by simply rephrasing the summaries at the end of each
19 section, which is I think, the etiology of this section.

20 PANEL MEMBER GLANTZ: Which is correct.

21 CHAIRPERSON FROINES: I would propose the
22 following. I propose that we go back to the discussion of
23 what we want in the findings and then when that's
24 finished, I'll take the document and I'll write the
25 findings and that we'll send it around to everybody for

1 their comments and review. Then we'll make final copies
2 and they'll out to everybody on the panel. And at the
3 next meeting, we can have a vote that will take five
4 minutes.

5 PANEL MEMBER GLANTZ: Can I just ask one question
6 of George or the appropriate legal people, if we do that,
7 will that cause the agency any problem, if we delay the
8 action to till October.

9 AIR RESOURCES BOARD SENIOR STAFF COUNSEL JENNE:
10 It sounds like you were looking for legal counsel. My
11 name is Bob Jenne. I'm the legal counsel for the Air
12 Resource Board. And your question was whether the delay
13 in the findings would have bad effects on OEHHA's ability
14 to go ahead and adopt the report.

15 My understanding, I think the best reading of the
16 statute, is that you've discharged your duty today to go
17 ahead and adopt -- to go ahead and make the finding that
18 the Health Effects report is based on sound scientific
19 knowledge.

20 You've already done and that's the main duty that
21 the Scientific Review Panel has. And the findings are
22 like an extra thing that you're doing that you could do
23 later and it shouldn't have any problem for OEHHA.

24 PANEL MEMBER GLANTZ: Okay. Well, the if that's
25 the case, then it's not a problem.

1 CHAIRPERSON FROINES: Okay.

2 PANEL MEMBER GLANTZ: I still can't believe that
3 you couldn't just go make the changes, while we wait. If
4 you think you can't, I'll stop whining.

5 (Laughter.)

6 PANEL MEMBER FRIEDMAN: Are you ready for some
7 suggestions.

8 CHAIRPERSON FROINES: Yes, go ahead.

9 PANEL MEMBER FRIEDMAN: Well, I agree with
10 Hanspeter and disagree with Stan about the need for some
11 additional words about environmental tobacco smoke. And
12 I've added a sentence. You know, I don't know how
13 detailed you want to get, but I would suggest on the last
14 page where there's some discussion of environmental
15 tobacco smoke, you know, that it's the sentence that ends,
16 "Despite the scientific evidence that it is." I would
17 suggest adding another sentence there saying the SRP
18 strongly recommends that ETS be listed as a toxic air
19 contaminant and that it then be placed in the top five
20 compounds for listing on SB 25. So I think we should have
21 some strong statement like that.

22 There's few other items. Again, these are not
23 major, but I was concerned on the first page under lead
24 where it just said there's large numbers of lead poisoned
25 children. That's sort of a disturbing statement, but I

1 think we need to put some quantitative -- that could be
2 200 or 10,000. I don't know large numbers mean. So I
3 think we need to get some kind of quantitative statement
4 as to what the number is.

5 PANEL MEMBER BLANC: You see, I guess where I was
6 trying to go with my comments was that I don't even think
7 that that's the direction we should be going.

8 PANEL MEMBER FRIEDMAN: Well, we can take out
9 some of this and have more brief one. That would be
10 fine and a lot of these may not apply.

11 CHAIRPERSON FROINES: So give me an example that
12 you would -- have that would be out --

13 PANEL MEMBER BLANC: I would say that there is a
14 substantial body of epidemiologic and laboratory
15 experimental data supporting -- or documenting the
16 neurotoxicity of lead with the preferential sensitivity of
17 the developing organs, period.

18 Second front, there is adequate documentation of
19 ambient airborne exposure in California at a level of
20 concern for these two reasons, the scientific -- the body
21 of scientific evidence is supportive of designation of
22 lead as a Tier 1 priority substance or, you know,
23 basically those are the three sentences.

24 Something like that, without saying, you know, it
25 was an originally a TAC, because you of neurotoxicity

1 without saying that children are exposed -- I mean, you
2 could say actually that the other line is that not only is
3 there preferential toxicity, but actually there's [PREF]
4 preferential exposure that would also be appropriate, but
5 I don't think you need to say that it's because of
6 hand-to-mouth activity and it's because of this. That's
7 all in the document.

8 The key things that we need need to say is, you
9 know, are there -- you know, were there multiple sources
10 of data, you know, were the observations made by more than
11 one study and more than one system? Is there biological
12 plausibility? Is there exposure? And if so, is it -- if
13 we need to comment on whether that was a primary exposure
14 or it's one of multiple roots, but the airborne sources
15 are not trivial. Whatever we need to say from that point
16 would be okay, but I don't think it needs to be a
17 reiteration of --

18 CHAIRPERSON FROINES: Gary, how do you feel?

19 PANEL MEMBER FRIEDMAN: I could go along. I
20 would agree with that. In which case a lot of my specific
21 comments would not be necessary. One thing I do feel
22 though, I wouldn't want to leave it just at neurotoxic,
23 which is sort of vague, I think we should say lowering of
24 IQ. That means something to people. Neurotoxicity could
25 mean, well, you know, they have little numbness somewhere.

1 So think we should be really specific about that.

2 CHAIRPERSON FROINES: Well, I actually -- this is
3 getting -- was where we don't want to go, but I think that
4 neurobehavior was the better term than neurotoxic, because
5 the peripheral affects are not necessarily greater in
6 children than in adults. And so I think the point is well
7 taken.

8 PANEL MEMBER BLANC: And the other thing that I
9 would urge, John, as you're going over the wording, is
10 even though it may seem pedantic. I think I would try to
11 use consistent phraseology especially in the summary
12 sentence, you know, of each one. You know, therefore, we
13 find that there is scientific support or whatever the
14 whatever the phraseology you develop. I think it would
15 just be -- because that was one of the things that
16 troubled me here is that inconsistencies could be
17 misinterpreted as happening, and unintended nuances it's
18 not. I don't think is intentional. It's just because
19 things were downloaded from the summary paragraphs of each
20 of these, and they were written by different people and
21 then they went through different edits.

22 PANEL MEMBER GLANTZ: Well, see I think that's
23 why if you said here are the five. I mean certain of
24 these things apply to all of them and you can say these
25 are selected as the five, because of these things that you

1 were just saying, and then we just put them in
2 alphabetical order.

3 PANEL MEMBER BLANC: I think there also needs to
4 be a comment in the first before it even gets to the
5 specific chemicals. I think in the first -- in another
6 paragraph up above, there needs to be some comment on the
7 scientific basis of considering in the same evaluation
8 such heterogeneous effects as carcinogenicity,
9 developmental toxicity, airway hyper-responsiveness.

10 That that's actually a strength of the -- a
11 scientific strength of the review rather than a weakness.
12 The implication and the public criticisms was that this
13 was somehow a weakness that because this document was not
14 dogmatic it saying any carcinogen will be the highest
15 priority, that it, in fact, looked at a variety of
16 different endpoints.

17 And similarly, I think it would be important to
18 make a statement that there is no accepted single
19 scientific approach to assessing childhood susceptibility.
20 And therefore, this kind of approach doesn't have an
21 established template to work from. And given that, that it
22 adequately, I think, dealt with the limitations from a
23 risk assessment point of view, if you will.

24 I mean it's not like a simple carcinogenesis risk
25 assessment where there's a bunch of different established

1 approaches out there. And if somebody did something that
2 was wildly different from the, you would have a benchmark
3 where you would say this is not the way it's done.

4 Gary.

5 PANEL MEMBER FRIEDMAN: I have nothing to add.
6 It almost sounds as that Paul should be doing the
7 rewriting.

8 PANEL MEMBER BLANC: I don't get penalized for
9 showing up.

10 (Laughter.)

11 CHAIRPERSON FROINES: That was exactly the
12 thoughts that I was having. It's especially true since
13 our dear friend Eleanor Fanning, you know, is briefly not
14 with us because she has given berth to an eight pound 12
15 ounce baby, and so we don't have Eleanor's input at this
16 point.

17 But I think Gary's right, don't you think it
18 would be good for you to write that paragraph.

19 PANEL MEMBER GLANTZ: Why don't you just write it
20 down right now, while you can remember it.

21 PANEL MEMBER FRIEDMAN: Well, do you feel
22 comfortable, John, shortening it along the lines that Paul
23 has suggested.

24 CHAIRPERSON FROINES: I don't have any problem at
25 all.

1 PANEL MEMBER FRIEDMAN: Then I just have a few
2 minor things that I would just give you and then you can
3 choose to incorporate them a lot if they're appropriate.
4 A lot of them won't be applicable anymore, because you're
5 going to be dropping out some of the details.

6 CHAIRPERSON FROINES: Yeah, I thought it's
7 interesting that you raised the lead poison, because that
8 was one of my, I thought -- I didn't go far enough. I
9 said children with elevated blood level rather than lead
10 poison, because I'm not sure that the evidentiary basis of
11 lead poisoning is, so --

12 PANEL MEMBER BLANC: I think that --

13 CHAIRPERSON FROINES: And the danger is that we
14 start to get involved in a detailed discussion of the
15 merits of some of the points, and I think that's what we
16 want to avoid.

17 PANEL MEMBER BLANC: Well, actually, I think it
18 would be useful, you know, in this introductory section
19 where you're talking about the fact that there isn't a
20 template would be, I think, to recognize the limitations
21 of this document and why those limitations are not fatal
22 flaws, because I think that there certainly is -- you
23 know, we all had our trepidations about this document.

24 I think since Tony's flight was cancelled, I'll
25 take the liberty of speaking for him a little bit is that,

1 you know, that the textual flaws in here are disturbing,
2 recognizing that it's partly a result of the time
3 constraints and partly a result of the fact that there
4 isn't a known established way of doing this. So I think
5 that we can be upfront about some of those limitations and
6 why we don't think they undermine the basic scientific
7 validity, rather than pretending that there aren't --

8 CHAIRPERSON FROINES: And, Gary, you'll notice
9 that he said the word you when he started that out, so
10 that he's still not volunteering to write that section.

11 I heard the you not me very clearly.

12 (Laughter.)

13 CHAIRPERSON FROINES: Peter's been generally
14 nodding his head positively for the last few minutes, so
15 I'm assuming that he --

16 PANEL MEMBER WITSCHI: I would agree. I really
17 think it takes some time to make this the disciplined
18 document it should be and not just an abstract of all the
19 toxicities which have been encountered in the way for you
20 in the literature. It really should be pretty much along
21 the lines Paul suggested.

22 PANEL MEMBER BLANC: You know, in fact, John, I
23 think it wouldn't be inappropriate, even I don't feel
24 strongly about this, but to say that our approach as a
25 panel was to keep in mind the Bradford Hill criteria of

1 causality as we were presented the data, even if they
2 never said that explicitly here, so that we did think
3 about reproducibility and strength of association and
4 biological plausibility and so forth.

5 PANEL MEMBER GLANTZ: The only problem I have
6 with that is those are really designed from just a purely
7 epidemiological perspective. And I think that -- I mean
8 just speaking on that very narrow point, I think it's a
9 mistake to sort of tie yourself to those criteria, because
10 I think they're very restricted, and the respect they
11 bring with them is very restricted.

12 I think the other issues that you were saying
13 about the complexity of the process, the multiple
14 mechanisms, the multiple endpoints, the fact that a
15 certain amount of judgement had to be brought to bear,
16 especially since we were restricted to five. I mean, I
17 think that's -- we're in, you know, you did get into some
18 apples and oranges type comparison. It just wasn't what
19 the cancer unit risks were or something.

20 That's okay, but I would not want to specifically
21 put those criteria in. I think the more difficult issues
22 that we've had to deal with in dealing with this document
23 have been the multiple endpoints and how you weigh those.

24 The other thing I'd just like -- and given that
25 us putting off a final decision on this till the next

1 meeting doesn't cause any problems for ARB or OEHHA, I'm
2 perfectly happy to do that, but I just would like to say,
3 and this sort of discussion is sort of continuing, we did
4 have these terrible time pressures on this document and it
5 still was a little bit rough around the edges in terms of
6 the presentation, but I think the basic quality is quite
7 good. And I think the quality in the process has improved
8 dramatically.

9 And Melanie, I think, had to leave, and she was
10 the main one who had to shepherd this through, but I, at
11 least, think we ought to recognize that I think OEHHA as
12 actually done a good job on the document under pretty
13 tough circumstances.

14 And that the, sort of -- some of these issues of
15 presentation, which hopefully will be cleaned up in the
16 final, final documented don't -- I mean, those aren't the
17 problems. There's been a tremendous -- if you go back and
18 compare this to the first draft, it's just a night and day
19 difference, in terms of the quality and the substance in
20 many areas too. And I think the discussions that we've
21 had about how to narrow the list down and making sure that
22 that was transparent to the reader have really affected
23 the quality of the document. So, you know, that's
24 slightly of the subject of the findings.

25 CHAIRPERSON FROINES: No, I agree with you, but I

1 would say that this does -- this process has been under
2 very, very tight time constraints, but it does demonstrate
3 that in thinking about the writing of these documents, we
4 need a more analytical approach as opposed to sort of
5 literature reviews. I think trying to address focus
6 criteria and focused questions in depth is very different
7 than covering the broad outlines of a chemical's toxicity.
8 And to the degree that that happened, that just didn't
9 work for us.

10 I'll give you an example of something that I'm
11 still bothered by, which is the industry has argued that
12 there are negative studies in terms of traffic density and
13 traffic impact on children in relation to the positive
14 studies by Brunekreef and others, and that it's still
15 true, it would be useful to see an analysis that said here
16 are these positive studies and here are these negative
17 studies, and is there any basis to understand why they
18 found different resolves to look at it analytically.

19 And I think that kind of an approach is still one
20 that we need to work on with OEHHA on these documents,
21 because I think it really does focus some of the questions
22 and the more focused some of the questions can be, I
23 think, that the better off we'll be in the long run.

24 So I agree with you, but I think there's still
25 some process issues to be addressed as we go forward.

1 Although we're dealing with such an enormously vacuous
2 database to work from still. That's always going to be a
3 problem.

4 Well, so you were the last person to comment. Do
5 you have comments?

6 PANEL MEMBER GLANTZ: No. I mean, I think if
7 people -- I've made one sort of somewhat substantive
8 suggestion about the presentation of the Tier 1. I think
9 that I don't disagree with anything that other people have
10 said.

11 CHAIRPERSON FROINES: The one question I was
12 going to raise, besides having to work on this was it
13 seems to me that one alternative for the Tier 2 compounds
14 is to basically have them in a single table and not have a
15 lot of text associated with them. And that you have the
16 chemical and the criteria for listing and then that's it.

17 It sounded to me like people still wanted to have
18 short comments, and not have it be done by a table, and so
19 I'll assume that that's not an option. Paul and Peter are
20 nodding their heads.

21 PANEL MEMBER WITSCHI: Yeah, I'd rather have the
22 short description.

23 CHAIRPERSON FROINES: The descriptive rather than
24 the table?

25 PANEL MEMBER WITSCHI: Yes.

1 CHAIRPERSON FROINES: Okay. Any other comments?

2 Then I guess we would entertain a motion to close
3 the meeting.

4 PANEL MEMBER BLANC: Before we adjourn, do we
5 have clarity on what the upcoming meeting schedules are
6 likely to be? Has there been some closure?

7 CHAIRPERSON FROINES: Jim.

8 Yeah, I was interested in hearing Stan saying
9 we're not meeting till October.

10 MR. BEHRMANN: We have not yet polled the panel
11 for their availability during the months of September,
12 October, November and December, but I think it was a
13 presumption, on my part, given the fact that the panel has
14 met now five months in a row, which is probably a record,
15 that the next meeting might not be until early October.
16 Those are presumptions on my part.

17 CHAIRPERSON FROINES: I would certainly support
18 that and I bet others would too.

19 MR. BEHRMANN: That's subject to academics
20 schedules, but also looking ahead to December, December
21 tends to be a short month in terms of our ability to meet,
22 so I would suggest maybe we look at early October, early
23 December as being the next two meeting time frames.

24 PANEL MEMBER BLANC: And can you clarify in terms
25 of the on again, off again Department of Pesticide

1 Regulation output or throughput or whatever the right
2 jargon would be? Should we be anticipating an October
3 something from DPR or --

4 MR. BEHRMANN: I believe so. And the Chairman
5 probably has had more communications with DPR THAN even I
6 have, but I believe they're anticipating bringing the
7 methyl report to the panel. That's subject to, I think,
8 agreement from the leads.

9 PANEL MEMBER GLANTZ: OEHHA will have the next
10 seven SB 25 compounds by then, right, George?

11 That was a joke for the record.

12 (Laughter.)

13 CHAIRPERSON FROINES: If I can make one comment.
14 The metam-sodium suit against the panel has been dropped.
15 It is no longer an issue. However, that was the good
16 news. The bad news is that metam-sodium document has and
17 will change, and so it will be brought back to the panel
18 for revote.

19 PANEL MEMBER BLANC: Well, I have a question
20 about that. I know we did get an Email circulated to that
21 effect. I don't want to prolong the meeting here today
22 unnecessarily, but there was an Email about it, and a
23 request from them, but as a panel member, I think I would
24 appreciate some comment from counsel as to whether or not
25 what they were proposing they can even do.

1 That is to say, it sounded liked they were
2 proposing that they were going to withdraw the document
3 and submit a new document. I think they could submit to
4 us a proposed amendment to an exist approved document, but
5 I'm not sure that what they can do is all of a sudden they
6 decide they're withdrawing a document that we approved.

7 CHAIRPERSON FROINES: Why don't we take it up,
8 because Nick Stern has been handling the suit and it's
9 better to, I think, deal with it with the person who's
10 been actively involved. And we'll communicate with the
11 panel outside of this particular meeting.

12 PANEL MEMBER BLANC: Good. I appreciate that,
13 because I just wasn't -- you know it was just sort of out
14 there and I didn't understand what the resolution was
15 going to be.

16 CHAIRPERSON FROINES: I do want to tell you some
17 very, very good news, really good news, I think. And that
18 is that we have -- Jim, can help me here. The panel has
19 been located for the last few years in a branch -- the
20 person we had direct contact with in the ARB was Jeanette
21 Brooks, as you know, who's the head of what's the branch
22 name?

23 MR. BEHRMANN: That's the Air Quality Measures
24 Branch within the Stationary Source Division.

25 CHAIRPERSON FROINES: Which is in the Stationary

1 Source Division, which is headed by Peter Venturini.

2 After a series of conversations with Alan Lloyd,
3 we've decided that the panel's work is of such
4 significance and importance and deserves major interaction
5 with ARB that we've -- the panel, the SRP has now been
6 moved to the Chairman's office, so we report directly to
7 Alan Lloyd who's the chair of the Air Resources Board.
8 And I think that represents a very major change and will
9 benefit our interaction with the ARB considerably and
10 Shankar Prasad who's here, represents Alan will be
11 representing Alan in these meetings.

12 I don't know if you want to say anything more
13 Shankar.

14 DR. PRASAD: Mr. Chairman, that's true, but it
15 has been yet to be finalized in terms of the process and
16 how and when it would happen. As you know, Dr. Lloyd left
17 on a three-week vacation soon after your conversation you
18 had with him on this positive move. And he will come back
19 and discuss with Mike Kenny and work those things out.
20 But, in general, recognizing the importance here, he has
21 decided to take this kind of an action.

22 CHAIRPERSON FROINES: This takes us back to --
23 Bill, to when we reported to the Executive Officer in the
24 late eighties and very early nineties, so this is
25 consistent with the panel's history overall. And so I

1 think it represents a continuation, which is -- I mean, I
2 think we have had a very good relationship with Jeanette
3 Brooks, for example. I think that's just been terrific.
4 So there's nothing negative about this change. It's all
5 positive.

6 And, Peter, I think was going to raise a
7 question.

8 PANEL MEMBER WITSCHI: No. I think I would be
9 happy if we got some more perks, like free coffee during
10 the meetings.

11 (Laughter.)

12 CHAIRPERSON FROINES: He wants a raise and free
13 coffee, and so we'll have to take that up.

14 PANEL MEMBER BLANC: I'd like to make a motion
15 that we adjourn.

16 PANEL MEMBER GLANTZ: Second.

17 CHAIRPERSON FROINES: All in favor?

18 (Ayes.)

19 CHAIRPERSON FROINES: It's unanimous.

20 (Thereupon the meeting of the Scientific
21 Review Panel adjourned at 1:35 p.m.)

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CERTIFICATE OF REPORTER

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

That I am a disinterested person herein; that the foregoing Scientific Review Panel meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting.

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

IN WITNESS WHEREOF, I have hereunto set my hand this 9th day of August, 2001.

JAMES F. PETERS, CSR, RPR
Certified Shorthand Reporter
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