

MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD
SCIENTIFIC REVIEW PANEL

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WEDNESDAY, FEBRUARY 24, 2010

10:30 A.M.

JAMES F. PETERS, CSR, RPR
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APPEARANCES

PANEL MEMBERS

John Froines, Ph.D., Chairperson (via teleconference)

Paul Blanc, M.D.

Gary Friedman, M.D.

Stanton Glantz, Ph.D.

Katharine Hammond, Ph.D.

Joseph Landolph, Ph.D. (via teleconference)

REPRESENTING THE AIR RESOURCES BOARD:

Mr. Jim Behrmann, Liaison

Mr. Peter Mathews

REPRESENTING THE OFFICE OF HEALTH HAZARD ASSESSMENT:

John D. Budroe, Ph.D., Staff Toxicologist

Andrew Salmon, Ph.D., Chief, Toxicology and Risk
Assessment Section

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1 you should go second, for sure.

2 PANEL MEMBER HAMMOND: Thank you.

3 PANEL MEMBER BLANC: Now, John, what I'd like to
4 do is clarify procedurally an easy method for us to track
5 modifications to the draft text that we have before us.
6 And I see that here, the San Francisco meeting, we have a
7 display screen with the text, that I think Peter has the
8 capability --

9 PANEL MEMBER GLANTZ: Peter --

10 PANEL MEMBER BLANC: Peter, the text that we have
11 before us is the draft findings?

12 MR. MATHEWS: This is the original public
13 document which was distributed and circulated to the
14 panel.

15 PANEL MEMBER BLANC: Right. And what I would
16 suggest is that I make a presentation; and as I go, I
17 suggest certain changes to it that Peter can note as we go
18 on the version that he has.

19 CHAIRPERSON FROINES: I think that's fine.

20 I just want to say one thing. When we did the
21 methyl iodide document, we had input from all eight
22 members. And when we finished getting input from all
23 eight members, it looked like a crazy quilt where you had
24 everybody's point of view and the document didn't flow.

25 PANEL MEMBER BLANC: Well, I don't anticipate

1 that's an issue here. What I anticipate is that mostly
2 we'll have corrections, some of which will be substantive,
3 some of them will be just typographical errors or
4 oversights, and that people will probably reach consensus
5 on them very quickly.

6 CHAIRPERSON FROINES: But I just want to make
7 sure that we try and keep the flow of the document,
8 because I think the flow of the document reads well, and
9 so people need to in a sense, not -- in a sense, rewrite
10 the document. But it's up to every individual obviously.
11 So I wouldn't take that away from anybody.

12 PANEL MEMBER GLANTZ: Well, I think we should
13 just proceed the way Paul has suggested. I really think
14 the idea of having Peter typing the changes in that we can
15 see is a good idea.

16 CHAIRPERSON FROINES: Well, Paul, go ahead then.

17 PANEL MEMBER BLANC: Okay. And what I'm also
18 going to suggest is as we get to certain points, if -- I
19 know Kathy will speak after me. But I would encourage her
20 also to interject if we come to a certain point as we go
21 where there's a text change that she would propose. And
22 that would make it simpler than us going through the whole
23 thing -- and going through the whole thing again.

24 The other thing that I intend to do is to address
25 and make suggestions in response to comments that I

1 received from Joe, and see if we can address those as I go
2 through my presentation as well.

3 Joe, would that be acceptable?

4 PANEL MEMBER LANDOLPH: Fantastic, Paul. Thank
5 you.

6 CHAIRPERSON FROINES: Paul, there's one other
7 issue; and, that is, that we got two comments from DPR.

8 PANEL MEMBER BLANC: Yes, I will address those as
9 well.

10 CHAIRPERSON FROINES: And my view is that you can
11 take them up or you don't need to take them up.

12 PANEL MEMBER BLANC: I will be addressing those
13 as I go.

14 CHAIRPERSON FROINES: All right.

15 PANEL MEMBER BLANC: So let's deal first with the
16 introductory paragraph, which is mainly intended to --

17 PANEL MEMBER GLANTZ: Why don't you go back so
18 we're looking at what he's talking about.

19 PANEL MEMBER BLANC: Yes, this is the paragraph
20 that begins, "The Scientific Review Panel on Toxic Air
21 Contaminants (Panel) met Thursday, December 10th," et
22 cetera, et cetera, et cetera.

23 Now, I don't have any substantive changes to
24 suggest. But Joe had a couple of very useful text
25 corrections, modifications here that I would support,

1 including in the document. The first of these -- and
2 these are all minor in this paragraph. The first occurs
3 in the second full sentence which in the draft reads,
4 "This included Part A, Environmental Fate Review and
5 Exposure Assessment," and goes on from there.

6 And Joe suggested the clarifying insertion, "This
7 included the following:" So "the following:" would be
8 inserted. And I think that that does make clear that
9 there is about to be a series of things following.

10 So first full sentence, "This included Part A" --

11 MR. MATHEWS: Yes.

12 PANEL MEMBER BLANC: It would say, "This included
13 the following: Part A."

14 CHAIRPERSON FROINES: Go ahead.

15 PANEL MEMBER BLANC: Is everybody fine with that?

16 PANEL MEMBER FRIEDMAN: Yes, that's excellent.

17 PANEL MEMBER BLANC: There needs to be a colon
18 there, Peter. Not a semicolon.

19 PANEL MEMBER GLANTZ: Why don't you turn on the
20 track changes function.

21 PANEL MEMBER BLANC: Okay. The second textual
22 change is simply in the middle of the paragraph, just
23 before it says "and Part C," that comma should be a
24 semicolon.

25 And then finally in the very -- just before the

1 very last brief sentence you'll see second line from the
2 bottom the current text says "as well as taking," and Joe
3 grammatically suggests the substitution "and took" instead
4 of "as well as taking," and that's fine.

5 CHAIRPERSON FROINES: Okay.

6 PANEL MEMBER BLANC: I don't think there's any
7 problem with that.

8 Okay. The next -- and, Kathy, do you have any
9 changes in the first paragraph?

10 PANEL MEMBER HAMMOND: No.

11 PANEL MEMBER BLANC: Okay. So Kathy doesn't have
12 any changes in the first paragraph either.

13 And since this is just almost perfunctory, I
14 think -- I would ask quickly from the other panelists,
15 first starting here Stan and Gary, any changes in the
16 first paragraph that you have?

17 PANEL MEMBER FRIEDMAN: No.

18 PANEL MEMBER GLANTZ: No.

19 PANEL MEMBER BLANC: Do you, John, have any
20 changes to the first paragraph?

21 CHAIRPERSON FROINES: No.

22 PANEL MEMBER BLANC: And since this reflects
23 Joe's changes, I'm assuming, Joe, you don't have any
24 additional changes.

25 PANEL MEMBER LANDOLPH: No. And thank you.

1 PANEL MEMBER BLANC: Okay. Then we get to the
2 substantive points below.

3 Point 1: "Chloropicrin is a widely used fumigant
4 pesticide..." And Joe quite correctly inserted the phrase
5 "and warning agent." He wrote, "and a warning agent," but
6 I think just "and warning agent." And I think that's
7 appropriate because it's used both for its pesticidal
8 effects and as a warning agent without intended pesticidal
9 effects. So I would suggest adding more or less Joe's
10 change but with a slight modification. So just adding the
11 words "and warning agent" to the end of that sentence.

12 Is that acceptable to everybody?

13 PANEL MEMBER FRIEDMAN: Yes.

14 PANEL MEMBER LANDOLPH: Yeah.

15 PANEL MEMBER BLANC: Number 2: Its physical --

16 PANEL MEMBER GLANTZ: No, at the end of the
17 sentence.

18 PANEL MEMBER BLANC: No, at the end of the
19 sentence.

20 MR. MATHEWS: Oh, I see. Correct.

21 PANEL MEMBER GLANTZ: I think you're making this
22 too complicated, Peter.

23 PANEL MEMBER BLANC: Why?

24 PANEL MEMBER GLANTZ: No, he gets it all anyway.

25 PANEL MEMBER BLANC: I mean it's just hard to

1 see, I think.

2 Okay. So --

3 PANEL MEMBER FRIEDMAN: That's not right.

4 Oh, okay. It is okay. Fumigant and pesticide,
5 is that --

6 CHAIRPERSON FROINES: Fumigant --

7 PANEL MEMBER BLANC: There's no "and" -- you
8 added that and "and" --

9 PANEL MEMBER GLANTZ: Not there. The previous
10 "and."

11 PANEL MEMBER BLANC: Between fumigant and
12 pesticide --

13 CHAIRPERSON FROINES: Paul?

14 PANEL MEMBER BLANC: Yeah.

15 CHAIRPERSON FROINES: You guys are talking over
16 each other.

17 PANEL MEMBER BLANC: We'll try not to.

18 CHAIRPERSON FROINES: And so try and have one
19 person talk at a time so that we -- because we're
20 hearing -- what we're hearing makes it difficult for us to
21 understand.

22 PANEL MEMBER BLANC: Okay, fine. We'll do that.
23 I'm sorry. We're just making -- it just that Peter's
24 having trouble seeing where he's putting in.

25 Okay. Point 2: As I have, "Its physical

1 chemical properties are such that its environmental fate
2 includes substantive and substantial release into the
3 airborne environment."

4 Kathy, that might be touching on your areas. Is
5 that anything where you feel change is indicated?

6 PANEL MEMBER HAMMOND: No.

7 PANEL MEMBER BLANC: Okay.

8 PANEL MEMBER FRIEDMAN: Could I ask why the word
9 "substantive" is there? Is it -- I'm not understanding
10 what it adds to "substantial."

11 PANEL MEMBER BLANC: I guess by substantive my
12 intention was to mean that it's real, and substantial is
13 it's a lot. But it's just a stylistic flourish, and I'm
14 happy to take it out if it adds more confusion than
15 it's...

16 PANEL MEMBER FRIEDMAN: To me, it's -- you know,
17 when you say it's a substantial amount, that sounds real
18 to me. So I'm not convinced that substantive -- it
19 clarifies anything.

20 PANEL MEMBER BLANC: I'm certainly happy to
21 delete it. I don't want to -- if you have that reaction,
22 somebody else is likely to have that reaction too.

23 So if that's okay, we'll take out -- Peter, are
24 you with us?

25 MR. MATHEWS: Yes.

1 PANEL MEMBER BLANC: -- we'll take out in point
2 number 2 the words "substantive and" and just leave the
3 word "substantial" there.

4 CHAIRPERSON FROINES: I have a change?

5 PANEL MEMBER BLANC: In number 2?

6 CHAIRPERSON FROINES: Yes.

7 PANEL MEMBER BLANC: Okay.

8 CHAIRPERSON FROINES: In my world chemical refers
9 to toxicodynamics and physical refers to toxicokinetics.
10 And so I would have that second paragraph read, "It's
11 physical and chemical properties are such..." and not
12 combine physical and chemical.

13 PANEL MEMBER BLANC: Certainly. Fine, excellent.
14 Good pick.

15 Okay. We'll move on to point three.

16 PANEL MEMBER GLANTZ: No. No, just
17 leave -- don't delete the word "as." It's just it's
18 physical and chemical properties.

19 PANEL MEMBER BLANC: Yeah.

20 PANEL LIAISON BEHRMANN: Leave the "are" -- the
21 "are" should be in there. Leave "are" in there as it was.

22 PANEL MEMBER BLANC: Okay. Thanks.

23 Point 3: "Such airborne release regularly occurs
24 through its routine use."

25 Kathy, any change to that?

1 PANEL MEMBER HAMMOND: I'm fine. Not till 16.

2 PANEL MEMBER BLANC: Well, great.

3 Four: "Patterns of over" -- I'm sorry --
4 "Patterns of use over time indicate more intense use as a
5 primary active ingredient (as opposed to a warning agent),
6 thus increasing levels of exposure."

7 That was based on the data we were shown.

8 PANEL MEMBER FRIEDMAN: Are you saying that
9 there's a time trend so that it's more --

10 PANEL MEMBER BLANC: Right. You weren't at that
11 meeting, but yeah.

12 PANEL MEMBER FRIEDMAN: Okay.

13 PANEL MEMBER BLANC: Now, do people -- is that
14 fine as it is? People don't object to "use" appearing
15 twice in the same sentence?

16 Fine.

17 Okay. Now, Joe -- moving on to the next point.

18 Joe had suggested the potential insertion of an
19 entirely new bullet basically addressing the policy issue
20 as to whether or not it was appropriate to use a mutagenic
21 chemical as a warning agent.

22 And, Joe, although I entirely agree with you from
23 a policy point of view, I think that it is not related
24 sufficiently to our role in the scientific findings that
25 we should put this bullet in our -- insert this bullet in

1 our findings, because it's really directly -- it's
2 directly addressing policy decisions that are not the
3 focus of our charge here.

4 CHAIRPERSON FROINES: Paul, speaking from the
5 point of view of the Chair, and always wanting to agree
6 with Joe, I have to disagree here, because I think
7 this -- to say use of chloropicrin is not justified gets
8 us into risk management decision making. And we are
9 precluded from risk management. So that this -- we -- DPR
10 would come back and say that we're entering an area that
11 we are not legislatively mandated to address.

12 PANEL MEMBER BLANC: John, I would interpret your
13 comments therefore as reinforcing what I just said.

14 CHAIRPERSON FROINES: Yes, exactly.

15 PANEL MEMBER BLANC: Okay. So I haven't read the
16 text of it in full to -- the entire group because I think
17 I've fairly correctly characterized its thrust. But Joe,
18 it's important for you to comment here, because it was you
19 that had made this suggested insertion.

20 PANEL MEMBER LANDOLPH: Yeah. Well, you know, I
21 certainly think that its use should be reconsidered. But
22 if you guys in your senior leadership feel that that's a
23 policy issue and we're not empowered to do it, then
24 I'll -- you know, I could withdraw my comment.

25 PANEL MEMBER FRIEDMAN: I have a suggestion that

1 might work here that's not a policy matter, but -- I don't
2 think it derives from this report that we've reviewed.
3 But how about saying that other warning agents that are
4 non-carcinogenic are available? Just state as a fact.
5 But of course it is not derived from this report, so I'm
6 not sure if it's justified.

7 CHAIRPERSON FROINES: But we don't know that.

8 PANEL MEMBER BLANC: You can't say -- we don't
9 know that based on the report we saw.

10 PANEL MEMBER FRIEDMAN: Okay. I thought, you
11 know, from what Joe had inserted, that it's sort of a well
12 known --

13 CHAIRPERSON FROINES: No, I think that the risk
14 assessment did not address other warning agents. And so
15 whether or not they exist may or may not be true, but we
16 don't have evidence to indicate that that would be
17 correct.

18 PANEL MEMBER FRIEDMAN: Okay. Well, I agree with
19 that, we didn't -- we were not given that evidence.

20 But maybe, Joe, do you have -- do you have any
21 more comment about that?

22 PANEL MEMBER LANDOLPH: Well, just that my intent
23 was to get some movement to see if we could trigger some
24 thinking, some reconsideration that some chloropicrin,
25 which is a mutagenic carcinogen, could eventually be

1 replaced with something else. And in the back of my mind
2 I had in mind that thiols, you know, that are used in oven
3 gas so that if your oven -- your stove leaks, you can
4 smell it right away and it's a warning. Now, I'm not an
5 expert in that area. Whether that's going to be good
6 enough, I don't know. But it just seems to me -- this
7 stuff has been around since 1910. And I'm not wild about
8 the public being exposed to it as a warning agent, because
9 it's a mutagenic carcinogen. So that was my intent, was
10 to create the movement --

11 CHAIRPERSON FROINES: But let me just say, what
12 he just said reinforces everything I said. He is right in
13 the middle of the risk management phase. And the issues
14 of, not the science, but the use is a risk management
15 issue and therefore we can't say that.

16 PANEL MEMBER BLANC: Right. And I think one
17 thing to consider for the panel is that at a certain point
18 I think it would certainly be the Chair's prerogative in
19 the communication to both the DPR and to OEHHA is to say
20 that we would like to see coming before the panel at some
21 point a risk assessment on warning agents beyond
22 chloropicrin so that --

23 CHAIRPERSON FROINES: Well, I have written a
24 transmittal letter to the director. And I can easily
25 modify it. And if Joe would be willing, I will add a

1 section to the transmittal letter that in a sense captures
2 the point that he's making in this document.

3 PANEL MEMBER LANDOLPH: Yeah, this is Joe.
4 That's fine with me. That will cover it then. My intent
5 is, you know, just to get DPR thinking about this to see
6 if we can do business in a better way in the future.

7 CHAIRPERSON FROINES: I also -- I don't want to
8 get off track, but I would also like to say that I think
9 DPR is going to -- is going to need on a scientific basis
10 to look at interactive effects between fumigants that are
11 being considered.

12 PANEL MEMBER BLANC: Okay, fine, good.

13 So let's move on. So --

14 PANEL MEMBER FRIEDMAN: So that's deleted now?

15 PANEL MEMBER BLANC: That was a suggestion that's
16 been deleted.

17 PANEL MEMBER FRIEDMAN: Okay.

18 PANEL MEMBER BLANC: So we're back to point 5 --
19 the old point 5: "Bystander overexposures have been well
20 documented."

21 This is my -- I thought I would sort of have a
22 nod to Hemingway here and --

23 (Laughter.)

24 PANEL MEMBER GLANTZ: Whatever.

25 CHAIRPERSON FROINES: What is the Hemingway part?

1 PANEL MEMBER BLANC: Just a simple short
2 sentence.

3 (Laughter.)

4 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
5 CHIEF SALMON: Something you've never seen before.

6 PANEL MEMBER HAMMOND: Six is getting --

7 PANEL MEMBER BLANC: Six is going more in that
8 direction.

9 "Chloropicrin is a severe irritant."

10 PANEL MEMBER FRIEDMAN: By the way, I would like
11 to compliment you, Paul, on your literary -- no,
12 seriously, this is what our findings should look like,
13 very clear statements about what we conclude from this,
14 not rehashing of the report.

15 PANEL MEMBER BLANC: Right, I think you made that
16 point.

17 So --

18 CHAIRPERSON FROINES: Well, and we want to give
19 him credit for being a very good existentialist too.

20 PANEL MEMBER HAMMOND: I'm an existentialist.

21 PANEL MEMBER BLANC: 7: "Clinical experience
22 with human overexposures demonstrates unequivocally that
23 respiratory tract injury over a range of severities can
24 occur from chloropicrin exposure, including data arising
25 from historical use as a chemical warfare agent."

1 Now, I mean you could argue that that last phrase
2 shouldn't be at the end but in the middle. But I don't
3 care.

4 PANEL MEMBER GLANTZ: I think it's very literary.
5 (Laughter.)

6 PANEL MEMBER BLANC: Can we move on to the next
7 point. No further editorial.

8 Okay. Point 8: "Controlled human exposure data
9 are also available that are pertinent to chloropicrin
10 irritant effects."

11 9: "Animal experiment data, some of it in
12 relation to chemical warfare applications, are consistent
13 with the irritant effects noted in humans."

14 10: "The weight of the available evidence also
15 supports classifying chloropicrin" -- originally I wrote
16 "cancer-causing substance warranting cancer risk
17 estimations." But Joe has suggested inclusion of the word
18 "mutagenic" before "cancer-causing," and I think that's a
19 fine clarification. We're not talking about a promoter
20 carcinogenic agent. We're talking about a mutagenic
21 cancer causing. And it has implications below.

22 PANEL MEMBER FRIEDMAN: But would you consider
23 taking out the words "weight of the" and just say, "The
24 available evidence also" -- or is there something --

25 PANEL MEMBER BLANC: I think there's a

1 state-of-the-art implication to the weight of the
2 evidence, which means that we --

3 PANEL MEMBER FRIEDMAN: Is that less sure?

4 PANEL MEMBER BLANC: No, more sure that we've --
5 that there's some conflicting evidence in the other
6 direction, but the weight of the evidence. Because if we
7 just said the available evidence, it's not -- some of the
8 available evidence goes in the other direction. But the
9 weight of the available evidence.

10 PANEL MEMBER FRIEDMAN: Okay. Good.

11 PANEL MEMBER GLANTZ: Okay. So add the word
12 "mutagenic" before "cancer."

13 CHAIRPERSON FROINES: I think I'm overreaching,
14 but if -- I would also have like the chloropicrin as an
15 electrophilic mutagenic cancer-causing substance.
16 But maybe -- is that too much?

17 PANEL MEMBER BLANC: I think it's too narrow,
18 John, because it excludes the possibility of
19 non-electrophilic interactions. I mean the implication of
20 saying it that way would be only as an electrophilic
21 substance as a genotoxic -- I mean mutagenic.

22 CHAIRPERSON FROINES: Well, I think actually
23 that's the case. But I won't argue with you.

24 PANEL MEMBER BLANC: Okay. Now I have a question
25 for Joe.

1 Joe, you specifically inserted Only the word
2 "mutagenic" and not the phraseology "genotoxic and
3 mutagenic." Was there a reason?

4 PANEL MEMBER LANDOLPH: No, I just wasn't
5 thinking. Because it is clastogenic too. So you could
6 say genotoxic would cover everything.

7 PANEL MEMBER BLANC: So that would be better than
8 mutagenic; is that correct?

9 PANEL MEMBER LANDOLPH: Yeah.

10 CHAIRPERSON FROINES: It would be more accurate.

11 PANEL MEMBER LANDOLPH: It's more all
12 encompassing.

13 PANEL MEMBER BLANC: So can we substitute the
14 substitution and put "genotoxic" rather than "mutagenic"?

15 PANEL MEMBER LANDOLPH: Yeah.

16 CHAIRPERSON FROINES: Yeah.

17 PANEL MEMBER LANDOLPH: That's fine.

18 CHAIRPERSON FROINES: Because as Joe says, it's
19 clastogenic. And so by just saying mutagenic, we're
20 overly narrowing this.

21 PANEL MEMBER BLANC: Okay. Great.

22 I'm going to move on then to point 11.

23 "For acute one-hour exposures" -- and there's
24 going to be a change here. The way it currently is
25 written is the following: "For acute one-hour exposures,

1 ocular irritation in humans is a scientifically
2 appropriate endpoint based on controlled human exposures;
3 for 8- and 24-hour exposure a constellation of effects in
4 exposed rabbits served as scientifically appropriate
5 endpoints."

6 Now, this is no longer correct vis-a-vis the
7 final document. In the final document, there was an
8 appropriate modification based on input from OEHHA, where
9 for the one-hour exposure -- and this -- you can see this
10 change on page 3 of part B as revised in yellow. And it's
11 a change in yellow. And what you'll see there is for
12 one-hour exposure it's increased nitric oxide in the nasal
13 air of humans. And, therefore, what I would suggest is
14 the current bullet 11 be broken into two bullets, 11 and a
15 new 12, and that 11 should read, "For acute one-hour
16 exposure" --

17 MR. MATHEWS: Exposure?

18 PANEL MEMBER BLANC: "...exposure" - getting rid
19 of the s - "exhaled nasal" -- I'm sorry -- "nasal air
20 nitric oxide in humans" --

21 PANEL MEMBER GLANTZ: Nitric oxide?

22 PANEL MEMBER BLANC: Nitric oxide. I'm sorry.

23 So instead of ocular irritation, it would be
24 nasal air nitric oxide --

25 CHAIRPERSON FROINES: I'm sorry. I don't

1 understand what you're saying.

2 PANEL MEMBER BLANC: Okay. For the one-hour
3 exposure they no longer use ocular irritation in humans as
4 the endpoint. The revised document uses nitric oxide in
5 nasal air.

6 CHAIRPERSON FROINES: I strongly disagree with
7 that. I think that it's one thing -- I think it's fine to
8 say nitric oxide and include that. But I want to have the
9 ocular irritation included as well.

10 PANEL MEMBER BLANC: But that's not the endpoint
11 that they used in the end, so we can't say that that's the
12 endpoint that they used.

13 CHAIRPERSON FROINES: Well, then there should be
14 another bullet that says that there is information
15 relating to ocular irritation as a bullet. I'm not a
16 great fan of nitric oxide as an endpoint. And without
17 getting into a lengthy scientific discussion, I think we
18 should have the ocular in there as well.

19 PANEL MEMBER BLANC: Well, I think I can address
20 your concerns by the following: I would still use the
21 following -- I would still have the following sentence:
22 "For acute one-hour exposure, nasal air nitric oxide in
23 humans is a scientifically appropriate endpoint based on
24 controlled human exposures."

25 Second sentence to the modified point 11 --

1 PANEL MEMBER GLANTZ: Delete the word "ocular."

2 PANEL MEMBER BLANC: And "irritant," right.

3 Okay. A new sentence following that: "In
4 addition, ocular irritation in humans based on controlled
5 human exposures is supportive of these acute one-hour
6 exposure effects."

7 CHAIRPERSON FROINES: That's okay with me.

8 PANEL MEMBER FRIEDMAN: Now, is that part of --

9 PANEL MEMBER GLANTZ: No, Peter, that should
10 go -- here, do you want me to do that.

11 MR. MATHEWS: Could you rephrase that again.

12 PANEL MEMBER LANDOLPH: This is Joe.

13 I agree with John's point very strongly too.

14 PANEL MEMBER GLANTZ: Because that's what you
15 wanted, right?

16 PANEL MEMBER BLANC: Where's that?

17 PANEL MEMBER GLANTZ: You wanted it here, right?

18 PANEL MEMBER BLANC: Yes, yes, yes.

19 Yeah, there's something missing. In addition
20 ocular irritation in humans based on controlled human
21 exposures is supportive of.

22 Okay. Now, there will be a new bullet, which is
23 number 12 now --

24 MR. MATHEWS: A new 12.

25 PANEL MEMBER BLANC: A new 12.

1 "For 8-and 24-hour acute exposure," -- there
2 should be comma inserted -- "a constellation of
3 effects" --

4 PANEL MEMBER FRIEDMAN: You don't have to
5 retype --

6 PANEL MEMBER BLANC: Could somebody else -- I
7 mean I think -- Peter, can maybe --

8 PANEL MEMBER GLANTZ: Here, I'll do it.

9 PANEL MEMBER BLANC: Let Stan manage this,
10 because --

11 PANEL MEMBER GLANTZ: My talent as a typist.

12 PANEL MEMBER BLANC: So this new bullet would
13 begin, "For 8 and" --

14 CHAIRPERSON FROINES: Come on.

15 PANEL MEMBER BLANC: What's that?

16 CHAIRPERSON FROINES: Please go ahead.

17 PANEL MEMBER BLANC: 12: "For 8-and 24-hour
18 acute exposure, a constellation of effects in exposed
19 rabbits served as a scientifically appropriate" -- "served
20 as scientifically appropriate endpoints." So it's
21 essentially what was the second part of that bullet now is
22 a separate bullet. Okay?

23 CHAIRPERSON FROINES: I agree.

24 PANEL MEMBER BLANC: Okay. Point 13, which is
25 the former 12. "For seasonal exposure, rhinitis in a rat

1 model provided an acceptable basis for modeling."

2 Point 14: "For" --

3 CHAIRPERSON FROINES: Paul, I'm not sure. But do
4 you think that ending that sentence with the word "an
5 acceptable basis for modeling" is -- does modeling really
6 stand by itself or does it need something to clarify it?

7 PANEL MEMBER FRIEDMAN: Modeling of what?

8 PANEL MEMBER BLANC: Modeling risk. Would you
9 like the word "risk" added at the end?

10 CHAIRPERSON FROINES: That would I think make it
11 clearer.

12 PANEL MEMBER BLANC: Okay.

13 PANEL MEMBER FRIEDMAN: Risk to humans, is that
14 what you're really saying?

15 PANEL MEMBER BLANC: For modeling risk to humans.
16 "Risk for" or is it "to"? "Risk to."

17 PANEL MEMBER FRIEDMAN: "Risk to..."

18 "...risk to humans." Could you add the words?

19 PANEL MEMBER GLANTZ: Um-hmm.

20 PANEL MEMBER BLANC: Point 14: "For chronic
21 inhalation, bronchiectasis in experimentally exposed mice
22 is an appropriate endpoint benchmark for modeling and,
23 given its severity, a BMR of 2.5 percent rather than a 5
24 percent level." And probably the word --

25 PANEL MEMBER GLANTZ: That seems to be missing

1 something.

2 PANEL MEMBER BLANC: The word "use of" before --

3 PANEL MEMBER GLANTZ: Before what? A use of --

4 PANEL MEMBER BLANC: "...and use of a" -- "and,
5 given its" -- it says, "and, given it's severity," it
6 should be "use of a BMR..."

7 PANEL MEMBER GLANTZ: Okay.

8 CHAIRPERSON FROINES: Paul?

9 PANEL MEMBER BLANC: Yeah.

10 CHAIRPERSON FROINES: One question. Since this
11 document will be read not just by scientists but by the
12 public, wouldn't it be -- would it be useful to spell out
13 BMR instead of using the initials?

14 PANEL MEMBER FRIEDMAN: Not only useful but
15 necessary.

16 PANEL MEMBER BLANC: Benchmark -- what's the R?

17 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
18 CHIEF SALMON: Response level.

19 PANEL MEMBER BLANC: So put the whole words
20 "benchmark response level," and then put BMR in
21 parentheses, because BMR is the widely used initial, isn't
22 it?

23 PANEL MEMBER HAMMOND: I thought the BMD for
24 dose.

25 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

1 CHIEF SALMON: Yeah, that's different.

2 PANEL MEMBER BLANC: But that's not what we're
3 talking here.

4 PANEL MEMBER GLANTZ: Okay. Done.

5 PANEL MEMBER BLANC: 15. Now, 15 --

6 PANEL MEMBER GLANTZ: This is the new 16?

7 PANEL MEMBER BLANC: The new -- no, it was 14
8 before. Now it's 15.

9 PANEL MEMBER GLANTZ: Right. Okay.

10 PANEL MEMBER BLANC: I think somehow an extra
11 bullet --

12 PANEL MEMBER GLANTZ: No, because 12 --

13 PANEL MEMBER BLANC: No, because it was -- we
14 took out one. Something happened.

15 PANEL LIAISON BEHRMANN: It changed 14 to 15 --
16 well, he can -- the numbering, we don't need --

17 PANEL MEMBER BLANC: Okay, okay. So just so
18 everybody understands, now, the new 15. This had
19 originally been worded as following -- this is one we have
20 changes too, Kathy? No?

21 PANEL MEMBER HAMMOND: No, not on 15.

22 PANEL MEMBER BLANC: Okay. "The cancer potency
23 factor for chloropicrin was reasonably derived and is
24 consistent with substantive risk -- "of cancer" is an
25 insertion from Joe -- "arising from low level exposure" --

1 and then he has added "to chloropicrin," which is fine.

2 So --

3 CHAIRPERSON FROINES: I want to suggest a
4 slightly altered version of that.

5 PANEL MEMBER BLANC: Of that first sentence?

6 CHAIRPERSON FROINES: No. What I would like,
7 first place you should take the Q out of mutagenic. But
8 what I think it should say --

9 PANEL MEMBER BLANC: But wait. John, John, John,
10 stop. You're moving on to the second sentence that Joe
11 suggested. I wanted to deal with the first sentence
12 first.

13 CHAIRPERSON FROINES: Okay. Sorry.

14 PANEL MEMBER FRIEDMAN: Change the "to" to "of"
15 as you've correctly read.

16 PANEL MEMBER BLANC: Right, I did.

17 So Joe had two suggestions for the sentence that
18 I've included, although I modified them slightly. So that
19 there would now be inclusion after the -- after "with
20 substantive risk" "of cancer," which would be an
21 insertion, "arising from low level exposure," and then the
22 addition "to chloropicrin."

23 Okay. Is everybody fine with that?

24 PANEL MEMBER FRIEDMAN: Yeah.

25 PANEL MEMBER BLANC: Now, we're going to move on

1 to a suggested second sentence that Joe had suggested for
2 us to consider, and which I'm going to comment on.

3 I think it's a combination of two things; one, a
4 useful --

5 CHAIRPERSON FROINES: Can I interrupt you?
6 Because I want to ask Stan a question.

7 PANEL MEMBER GLANTZ: Okay.

8 PANEL MEMBER HAMMOND: I think Paul should be
9 able to make his statement first as the lead.

10 CHAIRPERSON FROINES: No, because I'm still with
11 the first sentence.

12 PANEL MEMBER BLANC: Oh, okay. I'm sorry, I'm
13 sorry, I'm sorry. I didn't realize.

14 Okay. What's on the first sentence, John?

15 CHAIRPERSON FROINES: I'm a little -- just a
16 little bit concerned, not a lot, that we say, "consistent
17 with substantive risk to cancer..."

18 PANEL MEMBER BLANC: "...of cancer..."

19 CHAIRPERSON FROINES: It says "to cancer" in
20 my --

21 PANEL MEMBER BLANC: I changed that. And I made
22 it clear that we changed that to "of cancer."

23 CHAIRPERSON FROINES: Okay. Now, using the
24 multi-stage model with the 95 percent factors, we're going
25 to get a linear dose response curve in the low dose

1 region. And this says "consistent with substantive risk
2 of cancer arising from low level exposure to
3 chloropicrin."

4 I'm not sure that we can say when we're dealing
5 with a probabilistic model that -- to use the word "low
6 level exposure," I'm a little bit uncomfortable with,
7 because it may be that the linear -- it says we're going
8 to see a linear dose response curve. But the assumption
9 of substantive risk to cancer from low level exposure, I'm
10 not sure we can -- we can say that and feel -- the fact is
11 it's true. But from a mathematical point of view, we're
12 making an assumption, that there will be substantive risk
13 at low level exposure. And is everybody comfortable with
14 that notion?

15 PANEL MEMBER FRIEDMAN: Well, it doesn't say
16 there will be. It says it's consistent with it. So I
17 feel that sort of softens it a bit.

18 PANEL MEMBER BLANC: John, one possible wording,
19 if you would feel this would be less likely to lead to
20 confusion, could be, instead of saying "arising from low
21 level exposure," could say "arising over a range of
22 exposures."

23 CHAIRPERSON FROINES: It's okay with me.

24 PANEL MEMBER LANDOLPH: This is Joe. That's
25 better, yeah.

1 PANEL MEMBER BLANC: So instead of "from low
2 level exposure," it should now read "over a range of
3 exposures."

4 PANEL MEMBER GLANTZ: Okay.

5 PANEL MEMBER BLANC: Got that?

6 PANEL MEMBER GLANTZ: Um-hmm.

7 PANEL MEMBER BLANC: Now, I'm going to go on to a
8 second sentence that Joe had suggested. And this
9 sentence -- I think, Joe, you had two goals. One was to
10 reiterate the issue of linear, no threshold modeling; and
11 the second veered again into a policy implementation role
12 that probably overreaches what we need to do here.

13 So --

14 PANEL MEMBER LANDOLPH: This is Joe. What I was
15 struggling with, Paul, in the last discussion we had up in
16 San Francisco, was the idea that the carcinogenesis
17 process would start at a couple orders of magnitude lower
18 processes in the frank toxicity endpoints. So that
19 carcinogenesis would be occurring at very low doses based
20 on the linear, no threshold model.

21 CHAIRPERSON FROINES: Paul?

22 PANEL MEMBER BLANC: Well, let me suggest how I
23 think we can address both things. And then, John, let me
24 hear from you whether this is also consistent where you
25 were going with this. Is that okay?

1 CHAIRPERSON FROINES: Yes. You caught me, didn't
2 you?

3 PANEL MEMBER BLANC: Yeah.

4 So, first I'm going to read you the text as Joe
5 had suggested it. And then I'm going to read the text --
6 the modified text amendment as I would promote.

7 Joe had suggested wording, that "chloropicrin, a
8 mutagenic carcinogen, should be regulated on the basis of
9 a linear, no threshold dose-response curve to ensure that
10 the risk of cancer to the population exposed is 10 to the
11 minus 6 or less."

12 And I would suggest the following wording:

13 "Chloropicrin, a mutagenic carcinogen" --

14 PANEL MEMBER LANDOLPH: A genotoxic --

15 PANEL MEMBER BLANC: I'm sorry.

16 -- "a genotoxic carcinogen, should be modeled for
17 risk on the basis of a linear, no threshold dose-response
18 curve." No further wording.

19 PANEL MEMBER GLANTZ: I like that.

20 PANEL MEMBER LANDOLPH: Yeah, it's okay.

21 CHAIRPERSON FROINES: I agree with that, because
22 what I was going to say is I was going to put a period
23 after dose response curve, so that we didn't get into the
24 "to ensure the risk of cancer exposed" is -- so you've
25 dealt with my concern.

1 PANEL MEMBER BLANC: Okay. So the new wording
2 is --

3 PANEL MEMBER GLANTZ: I've got it.

4 PANEL MEMBER BLANC: Okay. Former number 15, new
5 number 16. Is that yours, or you're the old --

6 PANEL MEMBER HAMMOND: I'm the old 16.

7 PANEL MEMBER BLANC: Okay. "Experimental animal
8 studies provide sufficient data to derive scientifically
9 acceptable modeling of health equivalent concentrations
10 (HEC) and reference concentrations (RfC) for various
11 endpoints in acute, seasonal, and chronic exposure
12 scenarios and, for lifetime exposure, cancer risk."

13 Okay. Nobody has a problem with that?

14 Okay. Now, what I suggest for the former number
15 16, the new number 17 -- what?

16 OEHHA STAFF TOXICOLOGIST BUDROE: John Budroe,
17 OEHHA.

18 Point number 18.

19 PANEL MEMBER GLANTZ: This thing is renumbering
20 things.

21 OEHHA STAFF TOXICOLOGIST BUDROE: Well, we will
22 clean it up.

23 That would be "human equivalent concentrations"
24 instead of "health equivalent."

25 PANEL MEMBER BLANC: I'm sorry, human -- the word

1 "human" should be substituted for "health equivalent."

2 Thank you.

3 PANEL MEMBER HAMMOND: In all appropriate places.

4 PANEL MEMBER BLANC: Yeah.

5 Okay. Now we're moving on to the former 16, now
6 17. And I'm going to turn it over to Kathy because she
7 has edits for that, and I think it's best if she present
8 it in context.

9 PANEL MEMBER HAMMOND: Okay. So --

10 PANEL MEMBER GLANTZ: This is the one that starts
11 out experimental models?

12 PANEL MEMBER BLANC: No, we've just accepted that
13 with the change of "health" to "human" --

14 PANEL MEMBER HAMMOND: The one that starts "The
15 calculated Margins of Exposure..."

16 PANEL MEMBER GLANTZ: Okay.

17 PANEL MEMBER HAMMOND: So I would suggest, Stan,
18 that you don't try to type this in when I do this.

19 I would like to replace what's there with -- and
20 what I would like to do is to read this through once just
21 so you can hear the whole thing. And there's actually
22 contained within it two little versions. You may decide
23 on one or the other or both. So just --

24 CHAIRPERSON FROINES: Kathy?

25 PANEL MEMBER HAMMOND: Yes.

1 CHAIRPERSON FROINES: I just had one question.
2 Are margins of exposure --

3 PANEL MEMBER HAMMOND: John, John, John, John,
4 can you please wait and let me just do my talk, and then
5 we can --

6 CHAIRPERSON FROINES: No, no, it was just a -- it
7 was just a grammatical question.

8 PANEL MEMBER GLANTZ: Well, no. Let her -- she's
9 going to completely replace this.

10 PANEL MEMBER BLANC: So there will be no
11 grammar --

12 PANEL MEMBER GLANTZ: Just let her talk.

13 PANEL MEMBER BLANC: There will be no grammar as
14 you currently know it.

15 PANEL MEMBER HAMMOND: I would really like to
16 focus on the substance here. And we can do grammar --

17 CHAIRPERSON FROINES: Go ahead. I apologize.

18 PANEL MEMBER HAMMOND: Okay. "The bystander
19 exposure to chloropicrin are at levels that cause great
20 concern for the associated health risks following soil
21 fumigation, structural fumigation, and enclosed space
22 fumigation.

23 "California regulations state that if the air
24 concentrations of a pesticide are not tenfold below the
25 reference concentration that is considered protective of

1 human health, the pesticide meets the criteria to be
2 listed as a Toxic Air Contaminant. Thus the exposures
3 should be less than 10 percent of the RfC.

4 "However, all children bystanders and nearly all
5 adult bystander exposures to chloropicrin following soil
6 fumigation (as seen in Table 26 of the February 4th
7 document) were calculated to exceed 2,000 percent.
8 Converse to the margins of exposure (MOE) are much too
9 small. The MOEs should be greater than 10 if the NOEL is
10 based on the human studies or greater than 100 if the NOEL
11 is based on animal studies. Yet all MOEs are less than
12 10. And all acute MOEs are less than one.

13 "MOEs are inadequate for both children and adult
14 bystanders following structural fumigation (Table 28) and
15 enclosed space fumigation (Table 30). The MOEs for
16 potential indoor exposures are also inadequate (Table
17 29)."

18 So that's the end of that piece on the bystander.

19 So I have actually included, now you will notice,
20 both a discussion of the exposures from the point of view
21 of the RfC's and from the point of view of the MOE, which
22 they're almost like inversions of each other.

23 PANEL MEMBER BLANC: Do you think that's
24 necessary?

25 PANEL MEMBER HAMMOND: I don't know whether it's

1 necessary. You had had both in there. And so I put both
2 in. But I'm open to either way of doing it, whatever
3 people think is clearer. As I said, they're both in --
4 they're almost inversions.

5 PANEL MEMBER BLANC: Well, I think one thing you
6 could do is probably cut the text in half by simply saying
7 all of the -- what's the second part -- the RfC's --

8 PANEL MEMBER HAMMOND: Do you want to do it from
9 the RfC's or do you want to do it from the --

10 PANEL MEMBER BLANC: This doesn't matter. But
11 whichever one you do, just have a sentence which say,
12 consistent with the RfC's or the MOEs, also exceed
13 standard leaks, acceptable cut-offs, or whatever -- you
14 know, some sentence like that, without going into the
15 details.

16 PANEL MEMBER FRIEDMAN: With like the RfC is
17 spelled out, you'll spell out MOE at one point, right?

18 PANEL MEMBER HAMMOND: Oh, yeah, yeah.
19 Absolutely, right. I said converse to margins of
20 exposures (MOE).

21 PANEL MEMBER FRIEDMAN: Oh, great. Okay.

22 PANEL MEMBER BLANC: Well, then, I don't think
23 you need to go into all the detail. You'll say conversely
24 the margins of exposure also are --

25 PANEL MEMBER GLANTZ: -- lead to the -- yeah,

1 just say lead to the same --

2 PANEL MEMBER HAMMOND: Well, I had --

3 PANEL MEMBER BLANC: -- lead to the same
4 conclusion is actually --

5 PANEL MEMBER HAMMOND: The sentence I had was,
6 "Conversely, the margins of exposures (MOE) are much too
7 small." And then I went into detail. We just cut the
8 detail.

9 PANEL MEMBER BLANC: I wouldn't say "much too
10 small." I would just say "lead to the same conclusion."

11 PANEL MEMBER HAMMOND: Lead to the same
12 conclusion. Okay.

13 PANEL MEMBER FRIEDMAN: How about and leave out
14 "conversely," because that sounds like you conclude
15 the opposite -- just say --

16 PANEL MEMBER HAMMOND: Oh, you're right, you're
17 right, yes.

18 PANEL MEMBER GLANTZ: Yeah, say, "at the same
19 time."

20 CHAIRPERSON FROINES: Can I say one thing?

21 PANEL MEMBER GLANTZ: No.

22 PANEL MEMBER HAMMOND: Yeah.

23 PANEL MEMBER BLANC: Yeah, what? John, speak.

24 CHAIRPERSON FROINES: I propose -- I think what
25 Kathy has done is great, and so I'm for it. What I would

1 propose is that it become the last bullet in the document
2 and Joe's estimated cancer -- or the estimate cancer risk
3 goes up and becomes a bullet below the cancer that's just
4 above that at 15, so that you have -- so you don't have
5 cancer on one place and cancer in other and thereby
6 separating this -- so I would have this as the last bullet
7 because it's --

8 PANEL MEMBER HAMMOND: Makes sense.

9 CHAIRPERSON FROINES: -- very important.

10 PANEL MEMBER BLANC: Sure, fine.

11 PANEL MEMBER HAMMOND: I think that makes good
12 sense. Except that I have another bullet I want to add.

13 PANEL MEMBER BLANC: Well, we'll discuss that
14 later.

15 So the first, just -- John's point is what is
16 currently 18 and formally 17, "The estimate" -- it should
17 be "estimated" -- the first "estimate" is the "cancer risk
18 estimated" --

19 PANEL MEMBER HAMMOND: Estimated cancer risk.

20 PANEL MEMBER GLANTZ: Now I'm confused.

21 PANEL MEMBER BLANC: The very last point --

22 PANEL MEMBER HAMMOND: Could we not deal with
23 that issue now? But we'll say we're going to place it
24 appropriately --

25 PANEL MEMBER GLANTZ: Let's not worry about the

1 placement.

2 PANEL MEMBER HAMMOND: So let's stay with this
3 issue because this is confusing enough.

4 PANEL MEMBER BLANC: So could you reread then
5 what the first paragraph would look like.

6 PANEL MEMBER GLANTZ: No, I just -- I'm confused
7 because this computer is renumbering everything. You're
8 talking about replacing the bullet that currently says,
9 "The calculated Margins of Exposure..."

10 PANEL MEMBER HAMMOND: Yes.

11 So now I will reread this as I think we want it.
12 But let me -- before I reread, I just want to confirm
13 that, as I understand it, what we want is to basically
14 have the discussion from the RfC point of view and then
15 simply say that the MOEs have the same conclusion.

16 PANEL MEMBER BLANC: Right.

17 PANEL MEMBER HAMMOND: Okay.

18 PANEL MEMBER GLANTZ: So read it slowly so --

19 PANEL MEMBER HAMMOND: You want to be able to
20 type it in.

21 CHAIRPERSON FROINES: I think that the emphasis
22 should be on the RfC, and MOE comes second.

23 PANEL MEMBER HAMMOND: Okay. All right.

24 PANEL MEMBER GLANTZ: Slowly.

25 PANEL MEMBER HAMMOND: "The bystander exposure to

1 Chloropicrin" -- the bystander exposures" --

2 PANEL MEMBER GLANTZ: Wait a second.

3 PANEL MEMBER BLANC: "Bystander exposures" --

4 PANEL MEMBER HAMMOND: -- "exposures" --

5 PANEL MEMBER GLANTZ: -- "to chloropicrin" --

6 PANEL MEMBER HAMMOND: -- "chloropicrin are at
7 levels that cause great concern for the associated health
8 risks following soil fumigation, structural fumigation,
9 and enclosed space fumigation."

10 PANEL MEMBER FRIEDMAN: I wonder if there should
11 be a rearrangement so that --

12 PANEL MEMBER GLANTZ: Let her read the whole
13 thing.

14 PANEL MEMBER BLANC: And then we'll --

15 PANEL MEMBER GLANTZ: "Soil fumigation,
16 structural fumigation, and" --

17 PANEL MEMBER HAMMOND: -- "enclosed space
18 fumigation."

19 It's easier. We can see it.

20 "California regulations" --

21 PANEL MEMBER GLANTZ: Period, right?

22 PANEL MEMBER HAMMOND: Period.

23 PANEL MEMBER GLANTZ: Okay. "California" --

24 PANEL MEMBER HAMMOND: "California regulations
25 state" -- this is straight copy from their documents.

1 "California regulations state that if the air
2 concentrations of a pesticide are not tenfold below the
3 reference concentration" -- that's singular
4 concentration -- "tenfold below the reference
5 concentration that is considered protective of human
6 health, the pesticide meets the criteria to be listed as a
7 Toxic Air Contaminant."

8 CHAIRPERSON FROINES: What was that last -- say
9 it again.

10 PANEL MEMBER HAMMOND: I'm going to read that
11 sentence again.

12 "California regulations state that if the air
13 concentration of a pesticide are not tenfold below the
14 reference concentration that is considered protective of
15 human health, the pesticide meets the criteria to be
16 listed as a Toxic Air Contaminant."

17 CHAIRPERSON FROINES: Okay. I just didn't catch
18 "meets the criteria."

19 PANEL MEMBER GLANTZ: Okay.

20 PANEL MEMBER HAMMOND: All right?

21 PANEL MEMBER GLANTZ: Keep going.

22 PANEL MEMBER HAMMOND: "Thus the exposures should
23 be less than 10 percent of the RfC.

24 "However, all children bystanders and nearly all
25 adult bystander exposures to chloropicrin following soil

1 fumigation" -- not to type this. This is an aside. I
2 realized all those things in the table are not all
3 exposures. Those are all the estimated high-end
4 exposures, right?

5 PANEL MEMBER BLANC: That's okay. We can talk
6 about it.

7 PANEL MEMBER HAMMOND: Okay. So you've got
8 "following soil fumigation"?

9 PANEL MEMBER GLANTZ: Yeah.

10 PANEL MEMBER HAMMOND: And then I had "(as seen
11 in Table 26)..."

12 PANEL MEMBER BLANC: I don't think we need that.

13 PANEL MEMBER HAMMOND: Okay. -- "were calculated
14 to exceed 2000 percent."

15 PANEL MEMBER GLANTZ: Okay.

16 PANEL MEMBER HAMMOND: "The Margins of Exposure
17 lead to the same conclusion."

18 CHAIRPERSON FROINES: You want to put a page
19 number from the document?

20 PANEL MEMBER BLANC: No, we don't need to do
21 that, no.

22 PANEL MEMBER HAMMOND: Now though I had -- I'm
23 just going to say this. What I had also had there was
24 "MOEs are inadequate for both children bystanders." But I
25 that is just repetitive.

1 PANEL MEMBER BLANC: Right.

2 Can I just make some very simple typos.

3 PANEL MEMBER GLANTZ: Is that everything?

4 PANEL MEMBER BLANC: She has another bullet.

5 PANEL MEMBER GLANTZ: No, is that everything for
6 this bullet?

7 PANEL MEMBER HAMMOND: Yes, at least as we've
8 been talking about.

9 PANEL MEMBER GLANTZ: Okay.

10 PANEL MEMBER BLANC: Okay. So, Kathy, I have
11 some simple suggestions if you would accept them. I would
12 get rid of the word "however" and just start that
13 sentence, "All children..."

14 PANEL MEMBER HAMMOND: Okay. Sure.

15 PANEL MEMBER GLANTZ: Where is that?

16 PANEL MEMBER BLANC: The last sentence -- the
17 next to last sentence where it says, "However, all
18 children..."

19 PANEL MEMBER GLANTZ: Okay.

20 PANEL MEMBER FRIEDMAN: I have a couple --

21 PANEL MEMBER BLANC: Let me finish.

22 PANEL MEMBER FRIEDMAN: Go ahead.

23 PANEL MEMBER BLANC: And where you say,
24 "exposures" --

25 PANEL MEMBER HAMMOND: Yeah.

1 PANEL MEMBER BLANC: I would say, "exposure
2 scenarios."

3 PANEL MEMBER HAMMOND: Okay. Good.

4 PANEL MEMBER BLANC: And that takes into
5 account --

6 PANEL MEMBER GLANTZ: The exposure scenarios?

7 PANEL MEMBER BLANC: Yeah, where it says
8 "bystanders," down -- same sentence you were in.

9 PANEL MEMBER HAMMOND: Yes. Same line, yes.
10 Keep going to the right.

11 PANEL MEMBER GLANTZ: Bystander exposure
12 scenarios?

13 PANEL MEMBER BLANC: Yes.

14 PANEL MEMBER FRIEDMAN: Well, there's
15 something -- the children bystanders, you know, should fit
16 with that -- should be parallel to that.

17 PANEL MEMBER HAMMOND: All exposure scenarios for
18 children.

19 PANEL MEMBER FRIEDMAN: Yeah.

20 PANEL MEMBER GLANTZ: What, all exposures should
21 what? So we don't --

22 PANEL MEMBER BLANC: "All children bystander
23 exposure scenarios" --

24 PANEL MEMBER HAMMOND: -- "and nearly all those
25 for adults."

1 PANEL MEMBER BLANC: -- "and nearly all those for
2 adults." And then get rid of the rest of those words,
3 "bystander exposure scenarios."

4 And also put the words for children, "all
5 children bystanders exposure scenarios to chloropicrin,"
6 put it up there.

7 And delete all those following "soil fumigation."
8 And then I don't think you have to say "were calculated to
9 exceed." Just say exceeded.

10 PANEL MEMBER HAMMOND: Oh that -- yeah, your
11 further scenario replaces that. Good.

12 PANEL MEMBER GLANTZ: Okay.

13 PANEL MEMBER FRIEDMAN: Can I make another
14 suggestion.

15 In the first sentence, "The bystander exposures
16 to chloropicrin..." and move the last part of the
17 sentence, "following soil fumigation," blah, blah, blah,
18 "are at levels" -- you know, just rearrange the sentence
19 so that the exposures to what are at levels of concern.

20 PANEL MEMBER HAMMOND: So that goes after
21 "chloropicrin" -- yeah the following -- yeah, I like that.

22 So now it reads, just for the UCLA folks, "The
23 bystander exposure to chloropicrin following soil
24 fumigation, structural fumigation, and enclosed space
25 fumigation are at levels that cause great concern for the

1 associated health risks."

2 PANEL MEMBER BLANC: And do you want to say the
3 word "estimated" or "modeled" before "exposures"? Because
4 that's what they were.

5 PANEL MEMBER HAMMOND: Yes, it'll be estimated
6 bystander exposures. Okay?

7 PANEL MEMBER GLANTZ: Where?

8 PANEL MEMBER HAMMOND: The second word in the
9 sentence.

10 PANEL MEMBER BLANC: And then I have one
11 other -- two other minor suggestions. Instead of having a
12 separate sentence that says, "Thus the exposures should be
13 less than 10 percent," I mean I think it would be
14 sufficient to have "(exposures should be less than 10
15 percent)".

16 PANEL MEMBER HAMMOND: Okay.

17 PANEL MEMBER GLANTZ: Where is that?

18 PANEL MEMBER HAMMOND: Straight down. There,
19 yeah -- one more down.

20 PANEL MEMBER BLANC: You have a sentence that
21 starts "Thus."

22 PANEL MEMBER HAMMOND: Take that "thus" out. In
23 parentheses.

24 PANEL MEMBER BLANC: And it doesn't have to be
25 even "the..." It could just be "exposures."

1 And then put an end of parentheses period.

2 PANEL MEMBER HAMMOND: So now that sentence
3 reads, for the UCLA folks --

4 PANEL MEMBER BLANC: Now, carry it outside the
5 parentheses.

6 PANEL MEMBER GLANTZ: No, because it says --

7 PANEL MEMBER HAMMOND: Don't worry about it. Do
8 not worry about that.

9 Okay. So now the sentence reads --

10 PANEL MEMBER GLANTZ: I know people who get in a
11 three-hour debate about which side of the parentheses --

12 PANEL MEMBER HAMMOND: "California regulations
13 state that the air concentrations of a pesticide are not
14 tenfold below the reference concentration (RfC) that is
15 considered protective of human health, the pesticide meets
16 the criteria to be listed as a Toxic Air Contaminant.

17 PANEL MEMBER BLANC: And it shouldn't be "the".
18 Get rid of the "the". It would have to be "the criterion,
19 but it's "criteria."

20 PANEL MEMBER HAMMOND: Oh, right. You mean --
21 you can have plural after "the".

22 PANEL MEMBER GLANTZ: Or "meet criteria."

23 PANEL MEMBER HAMMOND: Okay. And then we have --

24 PANEL MEMBER GLANTZ: Okay. So here's what I --
25 we should do. Take away the period and say i.e.

1 PANEL MEMBER HAMMOND: And so then we have after
2 they meet the criteria -- meet criteria to be listed as a
3 Toxic Air Contaminant (i.e., exposures should be less than
4 10 percent of the RfC).

5 PANEL MEMBER GLANTZ: Period. Then you're right.

6 PANEL MEMBER BLANC: That's what I intended.

7 PANEL MEMBER FRIEDMAN: How about in line three,
8 instead of "concern for the associated health risk,"
9 "concern about the associated health risk? Would that be
10 better?

11 PANEL MEMBER HAMMOND: That's fine.

12 PANEL MEMBER GLANTZ: Okay. So are we happy?

13 PANEL MEMBER HAMMOND: Any other --

14 PANEL MEMBER GLANTZ: So why don't you read the
15 whole thing.

16 PANEL MEMBER HAMMOND: So I'm going to read the
17 whole thing. And then, you know, give UCLA folks a chance
18 to comment too since we've been doing it here.

19 "The estimated bystander exposures to
20 chloropicrin following soil fumigation, structural
21 fumigation, and enclosed space fumigation are at levels
22 that cause great concern about the associated health
23 risks.

24 "California regulations state that if the air
25 concentrations of a pesticide are not tenfold below the

1 reference concentration (RfC) that is considered
2 protective of human health, the pesticide meets the
3 criteria to be listed as a Toxic Air Contaminant (i.e.,
4 exposures should be less than 10 percent of the RfC).

5 "All children bystander exposure scenarios to
6 chloropicrin and nearly all those for adults following
7 soil fumigation exceeded 2,000 percent. The margins of
8 exposure lead to similar conclusions" -- "to the same" --

9 PANEL MEMBER GLANTZ: I think it should say,
10 "2,000 percent of the RfC."

11 PANEL MEMBER HAMMOND: Okay. "The margins of
12 exposure lead to the same conclusion."

13 PANEL MEMBER BLANC: Now, this is only referring
14 to soil fumigation. So you're saying for structural
15 fumigation it was okay?

16 PANEL MEMBER HAMMOND: No, no, no, no. Well,
17 read the first sentence. It's just the 2,000 percent.

18 PANEL MEMBER BLANC: So what were the --

19 PANEL MEMBER HAMMOND: There's a different
20 percentage. I'd have to go back and look them up. I'll
21 get them if you want them. Do you want them all? I mean
22 we could put them in. Do you want each of the percent?

23 PANEL MEMBER BLANC: Well, what I would say is,
24 what's the lowest exceeding it was?

25 PANEL MEMBER HAMMOND: Well, in a sense

1 that's -- for soil fumigation that was the most -- I just
2 had that --

3 PANEL MEMBER BLANC: Because I would say if they
4 ranged from, you know, 20 percent to 2,000 percent, they
5 were all above the level.

6 PANEL MEMBER HAMMOND: I said they were all
7 above. They are. I said all scenarios.

8 PANEL MEMBER BLANC: Oh, okay.

9 PANEL MEMBER GLANTZ: Well, I think what Paul is
10 saying is a good idea.

11 PANEL MEMBER BLANC: But the soil fumi --

12 PANEL MEMBER GLANTZ: Why don't we say "following
13 fumigation" and why don't you say "ranged from."

14 PANEL MEMBER BLANC: No, it's okay. My question
15 had to do with this just refers to soil fumigation.

16 PANEL MEMBER HAMMOND: Well, yeah. But the
17 trouble is -- that's probably when I did the MOEs. I kind
18 of -- I did break it down more, because it doesn't come
19 out quite like that. I mean just so people know, just for
20 point of reference, in Table 26, which is the one for soil
21 fumigation, the percents of the RfC's are over 300,000.
22 They're over a hundred thousand for many of them. So the
23 reason I say exceeded 2,000 percent, that's --

24 PANEL MEMBER BLANC: That's only for soil
25 fumigation.

1 PANEL MEMBER HAMMOND: Right. So now, if you go
2 to other -- if you go to other scenarios in other things,
3 for instance, for structural fumigation, it's 800 -- you'd
4 have to say over 300 percent -- over a hundred percent for
5 adults. It gets complicated.

6 PANEL MEMBER BLANC: So how about the
7 following --

8 PANEL MEMBER HAMMOND: But they're supposed to be
9 under 10 percent.

10 PANEL MEMBER BLANC: No, no, no. But how about
11 this. Why don't you just put the words "for example" at
12 the beginning of the sentence.

13 PANEL MEMBER HAMMOND: Okay. Fine.

14 PANEL MEMBER BLANC: Because then we're -- it's
15 not like we're implying that for structural fumigation.

16 Okay. I think that's fine.

17 PANEL MEMBER GLANTZ: Are we all happy?

18 PANEL MEMBER BLANC: Can I just ask one other
19 clarification, Kathy?

20 I notice that you made a distinction between
21 structural fumigation and enclosed space fumigation.

22 PANEL MEMBER HAMMOND: Um-hmm.

23 PANEL MEMBER BLANC: And just remind me, what
24 would be an example of closed space fumigation that's not
25 a structural fumigation?

1 PANEL MEMBER HAMMOND: I think --

2 PANEL MEMBER BLANC: You're talking about bins or
3 silos?

4 PANEL MEMBER HAMMOND: Right. Yeah, I was going
5 to say food bins, yeah.

6 PANEL MEMBER BLANC: Thanks. That's all I wanted
7 to know.

8 PANEL MEMBER HAMMOND: I don't know where they
9 kept grain metals in California.

10 PANEL MEMBER GLANTZ: So are the people in L.A.
11 happy?

12 PANEL MEMBER HAMMOND: Yeah, L.A.

13 CHAIRPERSON FROINES: Can I make one suggestion?

14 I think what you've done is extremely important
15 for this document, because in a sense it draws -- it draws
16 conclusions that are really fundamental to the document.

17 And I would suggest that we do -- the next little
18 paragraph -- one sentence paragraph of Paul's about -- as
19 documented in the meeting transcript the number of
20 specific corrections, that -- I would delete that and then
21 I would go straight to the panel finds that chloropicrin
22 should be classified as a TAC. And that I think flows
23 better going from Kathy's statements to the final
24 conclusion. And we can get by without saying that there
25 were going to be some changes made. I don't think that

1 necessarily adds. And I think if we go from Kathy to the
2 final conclusion, that that flows much better.

3 PANEL MEMBER BLANC: That's fine, John. The only
4 thing, you've jumped the gun a little bit, because as I
5 understand it, Kathy has an additional bullet.

6 PANEL MEMBER GLANTZ: Okay. But is there any
7 objection to deleting this paragraph? Because I agree
8 with John.

9 PANEL MEMBER BLANC: No, that's fine. I just put
10 that in there because I didn't know what would happen.

11 PANEL MEMBER GLANTZ: Okay. It's gone.
12 So let's go back to Kathy.

13 PANEL MEMBER HAMMOND: Okay. So this would --

14 PANEL MEMBER GLANTZ: So everyone is happy with
15 Kathy's --

16 CHAIRPERSON FROINES: Yes.

17 PANEL MEMBER HAMMOND: Kathy's not happy.
18 Well, Kathy's not happy.

19 CHAIRPERSON FROINES: I am happy.

20 PANEL MEMBER GLANTZ: Kathy wants to disagree
21 with -- see, Kathy wants to argue with herself now.

22 PANEL MEMBER LANDOLPH: Yeah, this is Joe.
23 Everything you did sounds fine, and I want to congratulate
24 you on your hard work. I just want to make the same
25 comment to Peter and Jim that I made the last time we met

1 down in L.A., which is, next time we have a meeting like
2 this, I will insist that we have a television screen so I
3 can see everything rather than just hear it, because
4 we're -- I'm at a little bit of a disadvantage compared to
5 you guys up there.

6 PANEL MEMBER HAMMOND: Absolutely.

7 PANEL MEMBER GLANTZ: Now, you could -- there is
8 web stuff where they could be seeing this.

9 PANEL MEMBER HAMMOND: Yeah, there are ways We
10 should do it, you know, that you could actually see all --

11 PANEL MEMBER GLANTZ: Next time, where they could
12 be seeing more on this.

13 PANEL MEMBER HAMMOND: Okay. Could we not go
14 into that now.

15 And my concern is that the sentence that starts
16 "For example" is following from not an example of the
17 preceding sentence but an example -- an example of the
18 first sentence. We have three sentences here. And the
19 for example is the for example of the first sentence, not
20 of the second sentence. So it's out of order, if you're
21 going to use the words "for example."

22 PANEL MEMBER BLANC: What words would you use? I
23 just want words that will make clear that you're only
24 giving one example.

25 PANEL MEMBER HAMMOND: Right.

1 PANEL MEMBER BLANC: I wouldn't read it that way
2 myself, but --

3 PANEL MEMBER HAMMOND: Because it's not an
4 example of California regulations dating.

5 PANEL MEMBER GLANTZ: No, but the --

6 PANEL MEMBER HAMMOND: You think it's okay? If
7 everyone else gets the same effect, I'm all right.

8 PANEL MEMBER GLANTZ: Why don't we do this. Or
9 maybe what we should do is take the second sentence and
10 put that first.

11 PANEL MEMBER HAMMOND: Well, I wanted a really
12 strong statement, which is what the first -- the way it
13 was --

14 PANEL MEMBER GLANTZ: I have great concern over
15 the associated health risks.

16 PANEL MEMBER BLANC: I think I have a solution.

17 PANEL MEMBER HAMMOND: You could put "for
18 example" right after that.

19 PANEL MEMBER BLANC: No. If you just say, "as an
20 example of" --

21 PANEL MEMBER HAMMOND: "the concerned" --

22 PANEL MEMBER BLANC: "As an example of" --

23 PANEL MEMBER GLANTZ: -- "the very high levels of
24 exposure."

25 PANEL MEMBER BLANC: -- "exposure."

1 PANEL MEMBER HAMMOND: Yeah. Okay.

2 -- "of exposure that are consistently expected"

3 -- or "estimated."

4 PANEL MEMBER BLANC: You don't even have to put
5 that.

6 PANEL MEMBER GLANTZ: "Exposure," --

7 PANEL MEMBER HAMMOND: Okay. Now, the other
8 thing I wanted to add --

9 PANEL MEMBER GLANTZ: So are we now happy?

10 PANEL MEMBER HAMMOND: Yeah, I'm happy. Are you
11 happy?

12 PANEL MEMBER FRIEDMAN: The only thing that
13 worries me a little bit is now you've got this example.
14 And then the margins of exposure lead to the same -- you
15 know, it sounds like that you refer to the example rather
16 than the whole --

17 PANEL MEMBER GLANTZ: Okay. Why don't we say
18 this --

19 PANEL MEMBER HAMMOND: The margins of exposure --

20 PANEL MEMBER GLANTZ: They'll say a margin of
21 exposure -- wait, wait -- margin of exposure approach --

22 CHAIRPERSON FROINES: Kathy, please would you say
23 what you want to say. We've got three people talking at
24 one time.

25 PANEL MEMBER HAMMOND: I'd love to. But, you

1 know, this Stan here.

2 All right. So Stan is suggesting the following
3 for the last sentence. And I'll have to -- I'll read it
4 all again to you again.

5 "A margin of exposure approach leads to the same
6 conclusion for all exposure scenarios." I totally agree
7 with that. That's good.

8 Would you like to hear that whole point again, or
9 do you feel -- the whole bullet, or do you feel okay with
10 it?

11 PANEL MEMBER GLANTZ: Why don't you read it
12 again.

13 PANEL MEMBER HAMMOND: I'm going to read it
14 again.

15 "The estimated bystander exposures to
16 chloropicrin following soil fumigation, structural
17 fumigation, and enclosed space fumigation are at levels
18 that cause great concern about the associated health
19 risks.

20 "California regulations state that if the air
21 concentrations of a pesticide are not tenfold below the
22 reference concentration (RfC) that is considered
23 protective of human health, the pesticide meets the
24 criteria to be listed as a Toxic Air Contaminant (i.e.,
25 exposures should be less than 10 percent of the RfC).

1 "As an example, the very high levels of
2 exposure" -- "as an example of the very high levels of
3 exposure, all children bystander exposure scenarios to
4 chloropicrin and nearly all those for adults following
5 soil fumigation exceeded 2,000 percent.

6 "The margin of exposure approach leads to the
7 same conclusions for all exposure scenarios." Okay?

8 CHAIRPERSON FROINES: Yes, that's fine.

9 PANEL MEMBER BLANC: So, Kathy, I understand you
10 have a second suggested possible additional --

11 PANEL MEMBER HAMMOND: Yeah, a possible
12 additional and --

13 PANEL MEMBER BLANC: Let's hear you present it.

14 PANEL MEMBER HAMMOND: This one is shorter. It
15 would be another bullet I think. But I'm open to your
16 suggestions.

17 CHAIRPERSON FROINES: Kathy, my first question
18 before you read it is I'm concerned about flow.

19 PANEL MEMBER HAMMOND: I understand that. Let me
20 read it, and then we'll talk about whether to include it
21 at all, whether to put it in a different place. I
22 understand the flow issues.

23 CHAIRPERSON FROINES: Because that was just the
24 point. I just wanted to -- that's all I wanted to say.

25 PANEL MEMBER HAMMOND: I got it.

1 But the point that I felt we should put in our
2 findings, but people may feel it doesn't belong there, is
3 the following would be:

4 "Worker exposures were not evaluated but are
5 cause for concern. There are" -- so that's all I was
6 going to say. But what I'm saying to you all is that the
7 entire document makes no risk assessment for workers.

8 PANEL MEMBER BLANC: Okay. That's not what
9 they're supposed to do for --

10 PANEL MEMBER HAMMOND: They are supposed to do
11 it, and they told us they were doing that and it would be
12 coming out in the spring. They are supposed to do worker
13 exposures. But they just --

14 PANEL MEMBER BLANC: But as part of this Toxic
15 Air Contaminant process?

16 CHAIRPERSON FROINES: But I don't think -- my
17 concern is that the AB 1807, which created the Toxic Air
18 Contaminant law, did not mandate this committee to look at
19 worker exposure.

20 PANEL MEMBER HAMMOND: Okay. Then if it's not
21 relevant, we can just take that out. And then we don't
22 have to worry about flow.

23 PANEL MEMBER BLANC: Yeah, I would suggest we
24 don't include that.

25 PANEL MEMBER HAMMOND: Okay. You know, it's

1 always in my head. I'm always thinking about that.

2 PANEL MEMBER BLANC: But, Kathy, one thing about
3 that comment is, John, in your transmittal letter -- John?

4 CHAIRPERSON FROINES: Yeah.

5 PANEL MEMBER BLANC: I mean you certainly could
6 say, you know, "obviously this didn't include worker
7 exposure. And we are happy to hear that you'll be dealing
8 with this in a separate assessment."

9 PANEL MEMBER HAMMOND: We'll be addressing this
10 issue.

11 CHAIRPERSON FROINES: I hope Sara has the earlier
12 stuff, because I have now forgotten what I was going to
13 say earlier.

14 PANEL MEMBER HAMMOND: What you were going to say
15 is that you wanted to go from this finding that I just
16 gave for the bystander exposures being too high to --

17 CHAIRPERSON FROINES: What was it --

18 PANEL MEMBER BLANC: You were supposed to say
19 something to carry forward Joe's point about the bullet
20 that we're not including or the text we're not including
21 about why would you use a mutagen as a warning agent.

22 PANEL MEMBER GLANTZ: Before we do that, is the
23 last finding the estimated cancer risk yielded a maximum
24 likely estimate as high as 3.4 times 10 to the minus 2 and
25 none lower than 2.2 times 10 to the minus 3? Is everybody

1 happy with that?

2 CHAIRPERSON FROINES: No.

3 PANEL MEMBER LANDOLPH: No.

4 PANEL MEMBER HAMMOND: Well, I think that that
5 should be -- there's a --

6 PANEL MEMBER GLANTZ: Well, let's get the -- we
7 agreed we're going to get the content and then worry about
8 the order.

9 PANEL MEMBER BLANC: Okay. So, Joe, maybe you
10 have a comment. This is your area.

11 PANEL MEMBER LANDOLPH: Yeah, I thought we could
12 just clean it up a little bit. There's like three
13 estimates that --

14 PANEL MEMBER BLANC: Well, We'd already done
15 that. The current version reads, "The estimated cancer
16 risk yielded maximum likelihood estimates as high as 3.4
17 and none lower." So it only has estimated twice now. Do
18 you want to get rid of another estimated?

19 PANEL MEMBER LANDOLPH: Just --

20 CHAIRPERSON FROINES: Read it again slowly.

21 PANEL MEMBER BLANC: "The estimated cancer risk
22 yielded maximum likelihood estimates as high as 3.4 times
23 10 to the minus 2 and none lower than 2.2 times 10 to the
24 minus 3."

25 PANEL MEMBER LANDOLPH: Maybe get rid of the

1 first one, just say, "The calculated cancer risk from
2 exposure to chloropicrin yielded maximum likelihood
3 estimates."

4 PANEL MEMBER BLANC: Okay. Let me --

5 PANEL MEMBER GLANTZ: Say that again.

6 PANEL MEMBER BLANC: The calculated --

7 PANEL MEMBER LANDOLPH: Calculated cancer risk.

8 PANEL MEMBER GLANTZ: Estimated for --

9 PANEL MEMBER BLANC: No, then insert -- insert
10 the words "from chloropicrin exposure yielded," and then
11 it continues to text that way.

12 PANEL MEMBER LANDOLPH: Yeah.

13 CHAIRPERSON FROINES: You have to have maximum
14 likelihood estimates. They all go together.

15 PANEL MEMBER LANDOLPH: Yeah.

16 PANEL MEMBER BLANC: Okay. So again, let me read
17 the final wording.

18 "The calculated cancer risk from exposure to
19 chloropicrin yielded maximum likelihood estimates as high
20 as 3.4 times 10 to the minus 2 and none lower than 2.2
21 times 10 to the minus 3.

22 PANEL MEMBER LANDOLPH: Yeah, that's fine.

23 PANEL MEMBER BLANC: And, Joe, did you take a
24 double look at the numbers that I didn't screw that up?

25 PANEL MEMBER LANDOLPH: That's what you've got

1 written down here.

2 PANEL MEMBER FRIEDMAN: Is that over the
3 lifetime, or what is that -- I say 3.4 times ten to the
4 minus 2. This means that 3.4 per 100 are going to get
5 cancer what, over lifetime?

6 PANEL MEMBER BLANC: Lifetime exposure risk.

7 PANEL MEMBER FRIEDMAN: I think that's important
8 to get some sense of what -- you know, do it like, you
9 know, next couple weeks they're going to get --

10 PANEL MEMBER BLANC: No, I think that Gary is
11 suggesting that after the words "maximum likelihood"
12 estimates it should be for lifetime exposure.

13 PANEL MEMBER GLANTZ: What about saying the
14 calculated lifetime exposure?

15 PANEL MEMBER BLANC: Okay. Well, because then
16 you have to use risk again.

17 CHAIRPERSON FROINES: It shouldn't be calculated
18 lifetime. It should like --

19 PANEL MEMBER BLANC: Oh, it should be from
20 lifetime exposure to chloropicrin.

21 CHAIRPERSON FROINES: Right, yeah.

22 PANEL MEMBER LANDOLPH: Yeah, that will be fine.
23 Then I had one more suggestion.

24 PANEL MEMBER BLANC: But, Joe, what I meant -- so
25 you checked the numbers. Do my numbers correspond to

1 their table of cancer risk in the document?

2 PANEL MEMBER LANDOLPH: I'll have to take a look
3 for you.

4 PANEL MEMBER BLANC: Okay. I mean I just want to
5 make sure that I didn't --

6 MS. KOBYLEWSKI: This is Sarah.

7 PANEL MEMBER BLANC: Yeah, Sarah.

8 MS. KOBYLEWSKI: When we got to bullet 18, you
9 made a suggestion to John about a point in the transmittal
10 letters. Do you remember what you said? I think it kind
11 of got lost in the --

12 PANEL MEMBER BLANC: There's two points. One is
13 that earlier -- much earlier in the discussion, point
14 about incorporating Joe's concern that we all share about
15 warning agent application of a carcinogen. That was from
16 way earlier in the conversation.

17 MS. KOBYLEWSKI: Yeah, I got that one.

18 PANEL MEMBER BLANC: And the second one is that
19 he also in his transmittal letter incorporates Kathy's
20 point by saying we recognized that this document did not
21 address occupational risk and we're very pleased that
22 you'll be addressing this seriously in a separate
23 document.

24 MS. KOBYLEWSKI: Okay. Thank you.

25 PANEL MEMBER FRIEDMAN: Again, to clarify this

1 last point. Is it lifetime exposure or lifetime risk to
2 lesser exposure? I'm not clear to that still.

3 CHAIRPERSON FROINES: It's lifetime -- it's the
4 former.

5 PANEL MEMBER FRIEDMAN: So if you are exposed to
6 this -- nobody's exposed to this steadily over a lifetime.
7 So, you know, I don't --

8 CHAIRPERSON FROINES: But, Gary, the
9 policy -- the federal and state policy is a 70-year
10 lifetime exposure. That's a default -- that's a default
11 point. So there's -- you can't change that.

12 PANEL MEMBER FRIEDMAN: Well, you know, it's sort
13 of meaningless though.

14 PANEL MEMBER HAMMOND: But it's a standard way
15 it's always done from --

16 CHAIRPERSON FROINES: It may be meaningless, but
17 that's the policy.

18 PANEL MEMBER HAMMOND: That's right.
19 That's what's always done.

20 PANEL MEMBER GLANTZ: So when you're comparing
21 relative toxicity, it's an apples to apples comparison.
22 So it's a standard -- it's assuming a standard dosing
23 regimen. And then they can take that and use that number
24 to adjust to get the absolute levels.

25 CHAIRPERSON FROINES: Yeah, Stan's right.

1 There's no question that nobody is exposed to this stuff
2 for 70 years. Nobody in their right mind would believe
3 that. And so your point's very well taken. The problem
4 is the federal and state policy state that's how
5 you -- that's how you do it though. And so there's not an
6 option.

7 PANEL MEMBER FRIEDMAN: Well, can we qualify this
8 with that this is the standard way of --

9 PANEL MEMBER BLANC: Well, no, I know we don't
10 have to. That's how it's done.

11 CHAIRPERSON FROINES: No, we're going to leave it
12 as it is.

13 PANEL MEMBER GLANTZ: Yeah, I think that this is
14 what it says, because -- I mean I think the addition -- to
15 say this is the lifetime risk is a good addition because
16 it's clarifying.

17 And then when they take this and use it in the
18 risk management, they then adjust it for the actual
19 exposure duration.

20 OEHHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
21 CHIEF SALMON: And inputs in calculation.

22 PANEL MEMBER GLANTZ: Yeah. So I think that's
23 a -- I think it's clear.

24 PANEL MEMBER BLANC: Okay.

25 PANEL MEMBER LANDOLPH: Well, Paul, this is Joe.

1 I looked up the numbers in Table 27.

2 PANEL MEMBER BLANC: Right.

3 PANEL MEMBER LANDOLPH: And It looks like the
4 highest number was 3.2 times 10 to the minus 2 rather than
5 3.4. They changed the numbers. And the lowest number
6 looked like 2.0 times 10 to the minus 3.

7 PANEL MEMBER BLANC: Okay. Can you change that
8 then?

9 Thank you, Joe, so much for doing that.

10 PANEL MEMBER LANDOLPH: My pleasure.

11 PANEL MEMBER BLANC: Okay. Now I'm going to go
12 on to the final paragraph. We're moving this point about
13 the cancer risk to follow -- Stan, it will follow the
14 bullet about cancer risk potency.

15 PANEL MEMBER GLANTZ: This is the thing that says
16 the panel finds that.

17 PANEL MEMBER BLANC: Yeah, but I just think --

18 PANEL MEMBER GLANTZ: Are you inserting
19 something?

20 PANEL MEMBER BLANC: Oh, no, I'm not inserting
21 anything. I'm just making clear that where -- now we're
22 talking about the moving of the calculated cancer risk.

23 PANEL MEMBER HAMMOND: The sentence we've just
24 been discussing is going to be moved --

25 PANEL MEMBER BLANC: -- to follow the bullet. I

1 don't know how it's numbered currently for you, but it's
2 the bullet that begins "The cancer potency factor for
3 chloropicrin was reasonably derived."

4 PANEL MEMBER GLANTZ: Moved to be before?

5 PANEL MEMBER HAMMOND: No, following.

6 PANEL MEMBER BLANC: Following.

7 PANEL MEMBER GLANTZ: To follow --

8 PANEL MEMBER HAMMOND: -- the cancer potency
9 factor.

10 CHAIRPERSON FROINES: Yes.

11 PANEL MEMBER BLANC: Is this being saved as you
12 do it?

13 CHAIRPERSON FROINES: Yes, so that the cancer
14 potency factor comes first and then the estimate --

15 PANEL MEMBER BLANC: Right. We've got it.

16 PANEL MEMBER GLANTZ: I just saved it.

17 PANEL MEMBER BLANC: Okay. So we've deleted that
18 other little sentence that was fluff.

19 And now, I want to read -- I want to read you
20 this wording and then I want to --

21 PANEL MEMBER GLANTZ: It's a wording for what?

22 PANEL MEMBER BLANC: The very last paragraph that
23 we have.

24 PANEL MEMBER GLANTZ: Okay. Well, before we do
25 that, so is everybody happy with all of the bullets and

1 the ordering now?

2 CHAIRPERSON FROINES: Yes.

3 PANEL MEMBER LANDOLPH: Yes.

4 PANEL MEMBER HAMMOND: Yes.

5 PANEL MEMBER GLANTZ: Okay. So that's done.

6 PANEL MEMBER BLANC: And I want to read wording
7 as I have it. And then I want to address the comments
8 that we received from DPR and see if maybe I missed the
9 boat or misinterpreted something that was said.

10 The current wording reads: "The panel finds that
11 chloropicrin should be classified as a Toxic Air
12 Contaminant. Moreover, the panel was also concerned to
13 learn that over and above current exposure to use of
14 chloropicrin in California is likely to increase
15 substantially should methyl iodide be introduced as an
16 agricultural chemical, given that chloropicrin is present
17 in relatively high concentrations in many proposed methyl
18 iodide formulations."

19 Now, I received a comment from Randy Segawa that
20 reads as follows. And I don't think all of you received
21 this, just John and Kathy and I.

22 He says, "I disagree this speculation. The
23 majority of methyl iodide products will be used as a
24 replacement for other fumigants, particularly methyl
25 bromide. The methyl iodide products will probably not be

1 used to fumigate new acreage or to apply chloropicrin at
2 higher rates. It is unlikely that the total amount of
3 chloropicrin used in the State will increase as methyl
4 iodide is registered."

5 Now, what we heard in the methyl iodide
6 presentation - and only Kathy and John and I were at that
7 because it was a separate process - was that the
8 percentage of chloropicrin used in methyl iodide is not as
9 a warning. It's at much higher levels than we're used to
10 having used as a warning agent, that many of the
11 formulations that were 25 and 50 percent. But maybe I
12 misunderstood that.

13 PANEL MEMBER HAMMOND: Well, I think --

14 CHAIRPERSON FROINES: But wait a second. Let
15 me --

16 PANEL MEMBER HAMMOND: I think you did.

17 CHAIRPERSON FROINES: Let me just do a
18 compromise. Why can't we say -- why can't we take out
19 some of that language and say, "May increase should methyl
20 iodide be introduced" and not make it so strong. And then
21 what you're saying is you're not saying that it is
22 absolutely going to happen, but it may happen.

23 PANEL MEMBER BLANC: That's fine with me also.
24 But I think the point -- maybe I was just off base with
25 relatively high concentrations.

1 PANEL MEMBER HAMMOND: My understanding -- and,
2 I'm sorry, I didn't go back and look at this -- but my
3 understanding was that a warning agent had to be under 10
4 percent. And it became an active ingredient if it went
5 over 10 percent. But there are some methyl iodide
6 formulations which actually have chloropicrin as an active
7 agent.

8 PANEL MEMBER BLANC: That's right, more than
9 methyl bromide.

10 PANEL MEMBER HAMMOND: And actually I don't know
11 how it's compared to methyl bromide. That's why I'm not
12 sure.

13 CHAIRPERSON FROINES: Then the percentage that we
14 heard in the testimony was that the percentage of
15 chloropicrin might become very high, and up to 75 percent.
16 And so it's not -- this is not a trivial issue that we
17 should just take Randy's speculation as the gospel truth.

18 PANEL MEMBER BLANC: Andy here has a comment.

19 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
20 CHIEF SALMON: I was just thinking. My understanding is
21 there are some methyl bromide formulations which do
22 include very large amounts of chloropicrin. But I
23 don't -- I don't know anything about the relative amounts.

24 PANEL MEMBER BLANC: Well, my memory - and, John,
25 I think you're confirming it, and Kathy's just saying

1 she's not sure - is that in fact it was much more typical
2 that the proposed methyl iodide formulations to be very
3 high in chloropicrin. And it was sort of the exception
4 that a methyl bromide application had those kinds of
5 levels of chloropicrin.

6 CHAIRPERSON FROINES: Yeah, there was no question
7 that there was testimony to that fact.

8 PANEL MEMBER BLANC: So then I would -- then what
9 I would -- if that's being said, then I think we should
10 stick with what we have with the following modifications:
11 The words "is likely to" should be replaced with "may."
12 And the last appearance of "high concentration" should be
13 "high concentrations." That's just a typo.

14 PANEL MEMBER GLANTZ: Wait.

15 PANEL MEMBER FRIEDMAN: And how about saying --

16 PANEL MEMBER BLANC: But you got it already.

17 PANEL MEMBER FRIEDMAN: Is it unsure enough to
18 say that instead of saying that given that its present in
19 high concentrations, say that if chloropicrin is present
20 in high concentration -- should we say "if," making it a
21 little less --

22 PANEL MEMBER BLANC: Yeah, sure.

23 We're going to replace the word "given that" with
24 "if."

25 CHAIRPERSON FROINES: Paul?

1 PANEL MEMBER BLANC: Yes.

2 CHAIRPERSON FROINES: I am also going to add this
3 issue to the transmittal letter as well.

4 PANEL MEMBER BLANC: Good.

5 PANEL MEMBER GLANTZ: This is Stan.

6 I would also change the word "was" to "is".

7 PANEL MEMBER BLANC: Where is --

8 PANEL MEMBER GLANTZ: And make that sentence a
9 separate paragraph. So I think we should have one
10 sentence that just says, "Panel finds that chloropicrin
11 should be classified as a Toxic Air Contaminant." And
12 then a new paragraph that says, "Moreover, the panel
13 is" --

14 PANEL MEMBER BLANC: Yes.

15 PANEL MEMBER GLANTZ: -- "also concerned to learn
16 that over and above current exposure the use of
17 chloropicrin in California may increase substantially
18 should methyl iodide be introduced as an agricultural
19 chemical."

20 PANEL MEMBER HAMMOND: I could stop there -- I
21 would just stop there, period. You don't have to say more
22 than that.

23 PANEL MEMBER BLANC: Well, the reason is --

24 PANEL MEMBER GLANTZ: Well, I think that --
25 rather than "if," and then maybe say "because" --

1 PANEL MEMBER HAMMOND: No, that's -- the
2 problem --

3 PANEL MEMBER GLANTZ: If chloropicrin is present
4 in relatively high concentrations --

5 PANEL MEMBER BLANC: Yeah, there's only one -- I
6 mean it's fine. "Is" is better than "was". But then you
7 should say "having learned" instead of "to learn," because
8 it's --

9 PANEL MEMBER GLANTZ: Where's --

10 PANEL MEMBER BLANC: "Is also concern having
11 learned that over and above."

12 PANEL MEMBER GLANTZ: Okay.

13 PANEL MEMBER BLANC: Because --

14 PANEL MEMBER GLANTZ: Yeah, okay.

15 PANEL MEMBER LANDOLPH: And this is Joe. I would
16 like to make a suggestion for John's transmittal letter.

17 Personally I think cancer assessments of 3 times
18 10 to the minus 2 and 2 times 10 to the minus 3 are too
19 high. Even if you cut them down by a factor of 10 because
20 of those unrealistic lifetime exposure -- knock it down to
21 10 to the minus 3 to 10 to the minus 4, I think that's
22 still too high. So I would suggest that if John feels so
23 inclined, to add a slight statement about -- a small
24 statement about that in a transmittal letter too.

25 PANEL MEMBER GLANTZ: Well, are you saying -- I

1 mean the other thing -- these are very high risks.

2 PANEL MEMBER LANDOLPH: Yeah, very.

3 PANEL MEMBER GLANTZ: So maybe what we ought to
4 do rather than just putting into a transmittal letter is
5 at the end of that bullet just say these are very high
6 risks.

7 PANEL MEMBER LANDOLPH: Yeah, that's fine.

8 PANEL MEMBER BLANC: The panel notes that these
9 are very high risks.

10 PANEL MEMBER GLANTZ: Well, I think just a letter
11 from --

12 PANEL MEMBER BLANC: Okay. These are very
13 high risk.

14 PANEL MEMBER GLANTZ: We want to keep it a
15 Hemingway likely.

16 I'm always known for brevity.

17 (Laughter.)

18 PANEL MEMBER BLANC: Well, yeah, I do note it as
19 being the soul of wit.

20 PANEL MEMBER GLANTZ: Right, that's true.

21 (Laughter.)

22 PANEL MEMBER BLANC: Okay. John, having said all
23 this, I would like to make a motion that the findings as
24 modified here be accepted by the panel.

25 PANEL MEMBER GLANTZ: Second.

1 CHAIRPERSON FROINES: All right. Is there any
2 discussion?

3 Then we should take a vote.

4 And all those in favor -- how do we do this?

5 PANEL MEMBER GLANTZ: Just read the names.

6 PANEL MEMBER BLANC: Yeah, read the names and
7 we'll say aye or nay.

8 PANEL MEMBER GLANTZ: Or we could just go
9 through.

10 Stan says aye.

11 PANEL MEMBER BLANC: Paul says aye.

12 PANEL MEMBER FRIEDMAN: Gary says aye.

13 PANEL MEMBER HAMMOND: Kathy says aye.

14 CHAIRPERSON FROINES: Joe?

15 PANEL MEMBER LANDOLPH: Joe Landolph says aye.

16 CHAIRPERSON FROINES: Okay.

17 PANEL MEMBER BLANC: John Froines -- what does
18 John Froines say?

19 CHAIRPERSON FROINES: I never can decide whether
20 the Chair should vote. So I'll say aye. But I still
21 never have figured out that question.

22 PANEL MEMBER BLANC: You're a voting member.

23 PANEL MEMBER GLANTZ: You're a voting member.

24 CHAIRPERSON FROINES: Am I a voting member?

25 PANEL MEMBER BLANC: Yes, you are.

1 PANEL MEMBER GLANTZ: Yes.

2 CHAIRPERSON FROINES: Because I didn't vote on
3 formaldehyde.

4 PANEL MEMBER BLANC: I'm so sorry.

5 (Laughter.)

6 PANEL MEMBER LANDOLPH: Is Gary still there? Did
7 he vote?

8 PANEL MEMBER FRIEDMAN: Yeah, I voted.

9 PANEL MEMBER GLANTZ: Okay. So are we all done
10 with this?

11 CHAIRPERSON FROINES: This is -- Joe's right,
12 that given the numbers of the DPR numbers, this is an
13 important issue.

14 PANEL MEMBER HAMMOND: Well, you know, I would
15 say not -- I mean that's absolutely true. But if you look
16 at the percent of the RfC's, I mean the acute risk -- I
17 mean -- yes, the cancer risks are alarming but the acute
18 risks are even more -- I mean --

19 PANEL MEMBER BLANC: No less alarming.

20 PANEL MEMBER HAMMOND: They are no less -- in
21 terms of the outcome of the disease basis of the health
22 outcome maybe less of a concern. But the probability of
23 it happening are much greater.

24 PANEL MEMBER FRIEDMAN: Yes.

25 PANEL MEMBER HAMMOND: You know, because we've

1 got, you know, tens of hundreds of thousands of percent of
2 the RfC, when you're supposed to be less than 10 percent
3 of it for these acute effects. So the acute effects are
4 like highly likely to occur. And the cancer is at --
5 which is even -- you know, the acute effects are likely to
6 occur for many people.

7 PANEL MEMBER BLANC: Kathy, do you think that's
8 why there's been several episodes of --

9 PANEL MEMBER HAMMOND: Well, I was going to say
10 yeah.

11 PANEL MEMBER GLANTZ: Okay. Well, why don't we
12 move along.

13 PANEL MEMBER FRIEDMAN: Do we take a quick break
14 before we --

15 CHAIRPERSON FROINES: Wait, wait, wait. I have a
16 question and, that is, does anybody there, like Peter or
17 Jim or whoever is there, from OEHHA or DPR, were the
18 recommended changes that we recommended, have they been
19 made?

20 PANEL MEMBER BLANC: Yes.

21 PANEL MEMBER HAMMOND: We kept -- we've had a
22 computer noting as we went along.

23 PANEL MEMBER BLANC: And we have copied the text
24 on to something?

25 PANEL MEMBER HAMMOND: And someone said --

1 CHAIRPERSON FROINES: No, no, I'm talking about
2 the risk assessment document that they were going to make
3 changes to.

4 PANEL MEMBER BLANC: Yeah, yeah, we have that in
5 yellow.

6 PANEL MEMBER HAMMOND: We have -- yeah, we have
7 highlighted. I didn't --

8 CHAIRPERSON FROINES: I don't have it -- okay,
9 thank you. I didn't have it in front of me.

10 PANEL MEMBER HAMMOND: The February 4th document
11 with highlights.

12 CHAIRPERSON FROINES: So everybody -- we should
13 take a ten-minute break, and then we will go on to OEHHA.

14 MR. MATHEWS: Okay.

15 (Thereupon a recess was taken.)

16 PANEL MEMBER BLANC: We're ready, just about.

17 CHAIRPERSON FROINES: Hey, Andy, we had a great
18 meeting yesterday with Horatio and Michelle.

19 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
20 CHIEF SALMON: Oh, great, yeah. I need to talk to you
21 about that soon. And I should be interested to hear where
22 we are.

23 PANEL MEMBER BLANC: Okay. So are we going back
24 on record now?

25 CHAIRPERSON FROINES: Well, whenever you tell me

1 that we --

2 PANEL MEMBER BLANC: Can we go back on the
3 record.

4 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
5 CHIEF SALMON: I don't think we ever went off.

6 PANEL MEMBER BLANC: Okay, fine.

7 CHAIRPERSON FROINES: Is everybody there?

8 PANEL MEMBER HAMMOND: We need Stan.

9 PANEL MEMBER BLANC: You can start, John. We
10 have a quorum. You can start.

11 CHAIRPERSON FROINES: I can't hear you.

12 PANEL MEMBER BLANC: You can start. You have a
13 quorum.

14 CHAIRPERSON FROINES: Okay. The agenda is OEHHA.
15 And they are to discuss reports in progress. And so it's
16 all yours.

17

18 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
19 CHIEF SALMON: Okay.

20 CHAIRPERSON FROINES: Whoever you are. Is it
21 Andy?

22 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
23 CHIEF SALMON: Yes, it's Andy Salmon. I'm the one that's
24 doing it.

25 (Thereupon an overhead presentation was

1 Presented as follows.)

2 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

3 CHIEF SALMON: And this is basically just a brief update.
4 We thought we'd tell you where we are with some upcoming
5 items so you knew what to expect.

6 These are items for the Air Toxics Hot Spots
7 program. You will of course recall that you recently
8 approved new technical support documents for the
9 derivation of acute and -- for 8-hour and chronic
10 reference exposure levels and for the cancer potency
11 estimation. And so there's been a bit of activity
12 following on from that.

13 I'm going to the next slide now.

14 --o0o--

15 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

16 CHIEF SALMON: The first thing I wanted to draw to your
17 attention is that we are in the process of developing
18 several new reference exposure levels.

19 CHAIRPERSON FROINES: Can I stop you, Andy?

20 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

21 CHIEF SALMON: By all means.

22 CHAIRPERSON FROINES: Peter and Jim --

23 PANEL LIAISON BEHRMANN: Yes.

24 CHAIRPERSON FROINES: The next time we have a
25 conference call like this, the people who are not -- who

1 are not at the central place, we should be sent the -- oh,
2 oh, here it is. I'm wrong. I was saying we should be
3 given the slides and I didn't realize I had them.

4 Go ahead.

5 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

6 CHIEF SALMON: I probably --

7 CHAIRPERSON FROINES: My apologies.

8 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

9 CHIEF SALMON: I probably owe you an apology, because it
10 was some way yesterday afternoon when I sent them to --

11 PANEL MEMBER BLANC: Well, I think though --

12 PANEL MEMBER GLANTZ: Just to -- I think we
13 should let Andy get back. But I think there is software
14 which would allow them to see exactly what we're seeing.
15 And we have an Internet connection here. And so if we do
16 this again, you should set it up so --

17 PANEL LIAISON BEHRMANN: Yes.

18 PANEL MEMBER GLANTZ: -- everybody's looking at
19 the same screen.

20 PANEL LIAISON BEHRMANN: Yes.

21 CHAIRPERSON FROINES: Kathy and I are on a
22 review -- advisory committee to Alcoa Corporation. And
23 they have a slide picture that must be 20 by 30 feet. So
24 obviously there's extremely relevant technology out there.

25 PANEL MEMBER GLANTZ: Okay. Go on.

1 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

2 CHIEF SALMON: Okay. So, what I wanted to do first was to
3 point out that we have three specific new REL packages in
4 preparation. These are for nickel and nickel compounds,
5 for methylene diphenyl di-isocyanate, and for toluene
6 di-isocyanate. And those three packages will actually
7 replace existing RELs which were developed under the old
8 guidelines. And also a package for caprolactam, for which
9 we don't have an existing reference exposure level.

10 And we have a number of other things also further
11 back up the pipeline. But these four will be appearing
12 shortly.

13 --o0o--

14 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

15 CHIEF SALMON: And the timetable is as follows: We aim to
16 publish a public review draft for these four materials
17 sometime within the next month. And that will start the
18 beginning of a 45- or possibly 60-day public comment
19 period.

20 And as an aside, we would encourage the Chairman
21 to appoint leads for these materials in the fairly near
22 future, so that we can take the opportunity to discuss
23 their initial impressions and any issues that the panel
24 leads may have with these materials. This would --

25 CHAIRPERSON FROINES: Andy?

1 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

2 CHIEF SALMON: Yes.

3 CHAIRPERSON FROINES: Would you tell me, if you
4 can, off the top of your head, when Jim and Peter should
5 plan the next meeting so it would be consistent with your
6 level of preparation. Are we talking one month, two
7 months, three months, four months? What's the timeframe?

8 PANEL LIAISON BEHRMANN: We'll work on it.

9 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

10 CHIEF SALMON: Yeah, Jim says that they're going to have
11 to work on it. From our point of view, I can say that I
12 think ideally we would be looking at at least two months
13 out from now, because of the necessarily -- two to three
14 months, because of the necessity of the public comment
15 period.

16 So as I say, the exact timing is something I will
17 defer to Jim and his negotiations with panel members.

18 (Laughter.)

19 CHAIRPERSON FROINES: Does anybody still use
20 toluene di-isocyanate?

21 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

22 CHIEF SALMON: It's our understanding that there's
23 significant amounts of use, mainly in -- you know, in
24 fairly enclosed industrial situations. But one of the
25 things I will say about both TDI and MDI is that one of

1 the things which got these two materials on our radar
2 screen is that we actually did have some inquiries and
3 public comments to the effect that this was something that
4 we should look at. So, you know, there's some concerns
5 out there. I'll -- well, I -- and I don't think we're in
6 a position to go into lots of detail, but I think that
7 it's fair to say that although TDI, in particular, is a
8 legacy compound in some context, it's still out there and
9 there's still concern about it.

10 And it's not so much that it's been replaced by
11 TDI -- by MDI. It's that -- those compounds actually have
12 somewhat different industrial uses. So it hasn't been
13 phased out. It's just people are trying to keep it under
14 better control than they used to.

15 PANEL MEMBER BLANC: Why don't you move on to 2,
16 and then we can maybe come back to some more generic
17 questions related to what it is you're working -- what
18 else you might be thinking about working on in the future,
19 because slide 2 covers the other things that you have on
20 your addenda.

21 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
22 CHIEF SALMON: Yes. Well, anyway -- that's right. This
23 is as much as I wanted to say about these specific RELs.
24 And obviously the details will be forthcoming to the panel
25 and the panel leads very shortly.

1 --o0o--

2 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

3 CHIEF SALMON: The other thing which is in the works is
4 the -- the final major technical support document for the
5 Hot Spots program. This is the updated version of the
6 exposure assessments and stochastic analysis TSD.

7 In the old guidelines this was the part 4, which
8 I believe the panel leads at that time were Stan and Roger
9 Atkinson.

10 So, anyway, I dare say that Stan at least may
11 have an interest in this one.

12 PANEL MEMBER GLANTZ: Yeah, I'm willing. I mean
13 anything with stochastic is -- I understand stochastic a
14 lot better than I understand chloropicrin.

15 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

16 CHIEF SALMON: I think this is a -- this particular
17 document, it actually -- it isn't mostly about actual
18 exposure assessments per se. What it's about primarily is
19 the exposure factors which are put into an actual
20 site-specific modeling analysis for the Hot Spots program.
21 So it includes distributions of uptake factors and various
22 methodological things. There is a component which is
23 being written by the Air Resources Board people, which
24 deals with the air modeling protocols. And also this
25 would be partnered with a revised version of the HARP

1 software, which is provided to help the districts and
2 consultants to actually implement the guidelines.

3 So this --

4 CHAIRPERSON FROINES: Andy?

5 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

6 CHIEF SALMON: Yes.

7 CHAIRPERSON FROINES: Just to cut you off, Kathy
8 has done an enormous amount of work both on methyl iodide
9 and clearly also on chloropicrin. So my guess is that she
10 would like a break.

11 So, Kathy, should I take the exposure assessment
12 part of this as the lead? Or unless somebody else has the
13 burning desire to do it. If this is an exposure
14 assessment, this would seem to fit within my somewhat --
15 some knowledge base. But if Kathy, you know, wants to do
16 it, I will defer.

17 PANEL MEMBER HAMMOND: Oh, if you're
18 volunteering -- I mean if it's between this and doing the
19 RELs, I'd rather probably do this. But if you're giving
20 me a break from all of it, I won't complain. But probably
21 the most -- the thing I'd have the most input on -- best
22 input would be on this.

23 CHAIRPERSON FROINES: Which would you prefer?

24 PANEL MEMBER HAMMOND: Well, I would assume on
25 this last -- this document. I mean --

1 CHAIRPERSON FROINES: The number 2?

2 PANEL MEMBER HAMMOND: As opposed to number 1,
3 yeah.

4 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

5 CHIEF SALMON: Could I interject, that when you consider
6 the actual timetable that we're proposing here, I don't
7 know whether we are talking about a conflict there. At
8 least the first batch of RELs that we're coming up with
9 will appear before this does and will hopefully be
10 completed before this. Because what we're talking about
11 is having this out for public comment some time during the
12 summer of this year and setting up the panel review in the
13 fall.

14 So we are a little bit further out with this one
15 than with the REL documents that I was talking about
16 earlier. But, you know, I think that we are probably
17 approaching the point at which we would be very anxious to
18 start having discussions with the panel leads, whoever you
19 decide to appoint. But we're still a little way away from
20 having something to share at --

21 PANEL MEMBER GLANTZ: But that would give you a
22 break.

23 PANEL MEMBER HAMMOND: Yes.

24 CHAIRPERSON FROINES: I'm going To ask Charlie
25 Plopper to be one of the two people on the RELs.

1 And is there somebody else who would be willing
2 to volunteer as the lead?

3 PANEL MEMBER BLANC: So, John, it's your concept
4 to have all of the RELs dealt with as a group by the same
5 leads? The one -- two leads would do all four RELs; is
6 that what you're thinking?

7 CHAIRPERSON FROINES: Well, I guess -- I guess
8 the answer to that is yes. But you just made me aware
9 that that may not be the wisest move.

10 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

11 CHIEF SALMON: If I could just interject a brief
12 observation. We do have in the person of Dr. Blanc
13 somebody who knows a great deal about sensitization of
14 occupation. And we also have Dr. Landolph, who knows a
15 fair amount about nickel. So that is merely an
16 observation from the gallery, but --

17 PANEL MEMBER BLANC: John, I think what we should
18 do is have some Email exchanges about this, because you
19 have some people who aren't here.

20 And also I guess I have a question. We have two
21 vacancies or one vacancy?

22 CHAIRPERSON FROINES: We have --

23 PANEL MEMBER BLANC: -- one vacancy.

24 CHAIRPERSON FROINES: -- Atkinson's vacancy.

25 PANEL MEMBER BLANC: And when do you anticipate

1 that will be filled?

2 CHAIRPERSON FROINES: I don't know. There are --
3 there's all sorts of lawsuits and other things going on.
4 It's apparently quite complicated. And so the answer to
5 it is --

6 PANEL LIAISON BEHRMANN: John?

7 CHAIRPERSON FROINES: -- Jim at some point can --

8 PANEL MEMBER GLANTZ: Well, Jim wants to talk.
9 Let Jim talk.

10 PANEL LIAISON BEHRMANN: John, this is Jim
11 Behrmann, the liaison to the panel.

12 The law provides for a process where the UC
13 President's office provides names to the secretary. And
14 they have done so. And the secretary now has those names
15 under advisement, and should be making a decision
16 hopefully soon. So I would expect a decision probably in
17 the next month or two on the atmospheric science category.

18 CHAIRPERSON FROINES: I'm not going to start a
19 new person as the lead. We'll let other people be the
20 lead.

21 PANEL MEMBER BLANC: Okay. But, anyway, that
22 being said, I think we should --

23 CHAIRPERSON FROINES: Well, the new person can
24 see how we operate.

25 PANEL MEMBER BLANC: That's fine. But just

1 follow up on this other thing by Email.

2 PANEL MEMBER GLANTZ: Okay. Well, Kathy agreed
3 to work on the technical support document, I think.

4 CHAIRPERSON FROINES: All right. So let's go
5 ahead.

6 PANEL MEMBER GLANTZ: Right? Didn't you?

7 PANEL MEMBER HAMMOND: Yes.

8 PANEL MEMBER GLANTZ: Okay.

9 PANEL MEMBER BLANC: Yes, I meant -- I want to --
10 yes, I saw that. I meant for the RELs, how you divide
11 them up. I think one thing you probably will want to do
12 is have the same two leads work with the same -- work with
13 both isocyanates. I think that's reasonable. But you can
14 figure that out as you go.

15 I'd like to make a comment though about slide
16 number 1 and, that is, that I'd like to express some
17 disappointment. It was my impression that all of the work
18 on the two technical documents was the necessary
19 investment of labor in advance that deferred looking at
20 new chemicals and was worth the investment. But I never
21 anticipated that the next step would be a series of
22 revisions of existing RELs, given the backlog as I
23 understand it of chemicals worthy of attention. Now,
24 maybe I'm admixing two different issues.

25 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

1 CHIEF SALMON: We're actually working on, to an extent,
2 based on the prioritization of chemicals which we
3 developed originally in I think 2001, which did flag a
4 number of chemicals which we felt were of particular
5 concern, where we felt that the existing recommendations
6 weren't necessarily adequate to protect children's health.

7 So this partly does reflect the prioritization
8 which we undertook at that time.

9 CHAIRPERSON FROINES: Andy, I would appreciate if
10 you would send to the panel that list of chemicals,
11 because some of us feel pretty strongly about chemical
12 selection and I think we should be given the opportunity
13 to take a look at that, precisely because I think it's
14 not -- I think depending upon what chemicals are on that
15 list, one might say TDI may not be the highest priority
16 that we should be focusing on.

17 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION

18 CHIEF SALMON: Well, as I say, in that particular case,
19 one of the reasons - and only one of the reasons - but one
20 of the reasons why that one was selected to be addressed
21 was simply -- was because we did actually have some
22 specific public comments to the effect that that was
23 something which should be treated as an important area for
24 us to look at.

25 But I will certainly send you that list. And I'd

1 also -- you know, I mean the panel I think has the
2 authority and the opportunity to make suggestions as to
3 what we and the ARB should be looking at at any time.

4 Having said that, ultimately I think what we, you
5 know, OEHHA do is actually controlled by what we're told
6 to do by the Air Resources Board. So they, rather than
7 we, are actually in the regulations and the interagency
8 agreement. They are the actual gatekeepers as to what
9 gets done.

10 CHAIRPERSON FROINES: Well, I agree. But I'm
11 giving a talk to the conference next month, in which I'm
12 going to be talking about chemicals that certainly should
13 be being dealt with and are not.

14 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
15 CHIEF SALMON: Well, we will undoubtedly be paying a great
16 deal of attention to what you have to say there.

17 PANEL MEMBER BLANC: But, Andy, you could
18 understand how I might perhaps have some sense of
19 frustration.

20 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
21 CHIEF SALMON: Yes. I think it's also fair to say that
22 there are -- that we have a sense of frustration, not only
23 with the selection, but also with the speed of the
24 process, which is -- I have to say, has been significantly
25 impacted by the loss of time and rather budget problems

1 which we're currently dealing with.

2 PANEL MEMBER BLANC: Well, I'd like to move then
3 that we adjourn, John, unless there's some other
4 administrative matters you would want to bring up.

5 CHAIRPERSON FROINES: I think that's fine.

6 Does the panel -- Andy, tell the panel about the
7 March 15, 16 meeting, if you would.

8 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
9 CHIEF SALMON: Sorry. I'm March 15?

10 CHAIRPERSON FROINES: The TS RTP meeting. The
11 hazard trait meeting, the 905 meeting.

12 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
13 CHIEF SALMON: I'm sorry. I'm not in a position to say
14 very much about that. That's not -- you know, that one
15 doesn't fall within my area of influence, and I'm not
16 primed to give you any details on that. I don't know
17 whether there's somebody else here who can do a better job
18 of that.

19 CHAIRPERSON FROINES: Well, I'll get Melanie to
20 send out an Email.

21 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
22 CHIEF SALMON: Yes. I'm aware of it. But unfortunately
23 that's something which I have not been dealing with. So
24 other than --

25 CHAIRPERSON FROINES: What it is is OEHHA has

1 been mandated under AB 905 to establish a list of hazard
2 traits. And so there's going to be a two-day conference
3 on all sorts of topics about what constitutes a hazard
4 trait.

5 PANEL MEMBER HAMMOND: Hazard what?

6 CHAIRPERSON FROINES: Hazard trait.

7 OEHHA AIR TOXICOLOGY AND RISK ASSESSMENT SECTION
8 CHIEF SALMON: This is in connection with the Green
9 Chemistry program.

10 PANEL MEMBER HAMMOND: T-r-a-i-t?

11 CHAIRPERSON FROINES: Yeah. Whoever invented
12 that term was nuts. But that's what they did.

13 PANEL MEMBER BLANC: I think you don't really
14 want them -- we're still in session, so we're still -- the
15 record is still in progress. So I think I would interpret
16 what you mean as whoever invented that phrase might have
17 considered how confusing it would be --

18 CHAIRPERSON FROINES: Well --

19 PANEL MEMBER BLANC: -- rather than use the
20 colloquial term "nuts," since this is still on the record.

21 CHAIRPERSON FROINES: I was joking.

22 PANEL MEMBER BLANC: Okay.

23 CHAIRPERSON FROINES: So that one should not take
24 that seriously.

25 PANEL MEMBER BLANC: Oh, okay. Thanks.

1 PANEL MEMBER GLANTZ: Well, why don't we adjourn.

2 CHAIRPERSON FROINES: Let's adjourn.

3 Somebody make a motion.

4 PANEL MEMBER BLANC: I move that we adjourn.

5 PANEL MEMBER FRIEDMAN: Second.

6 CHAIRPERSON FROINES: All in favor?

7 (Ayes.)

8 (Thereupon the California Air Resources Board,
9 Scientific Review Panel adjourned at 12:37 p.m.)

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