

128th COSMETIC INGREDIENT REVIEW EXPERT PANEL  
MEETING

Washington, D.C.  
Tuesday, September 10, 2013

## 1 PARTICIPANTS:

## 2 Voting Members:

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5 CAROL EISENMANN, M.D.  
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Personal Care Products Council7  
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1 P R O C E E D I N G S

2 (8:30 a.m.)

3 DR. BERGFELD: Okay. Finally we're at  
4 8:30. We're going to open this meeting.  
5 Everybody is ready. And this is the 128th meeting  
6 of the CIR Panel. And before we go into anything,  
7 I want to welcome Lillian Gill, our Director, our  
8 new Director. And we want to say that we had the  
9 most wonderful entry last night, ate a wonderful  
10 dinner, and we thank you very much, Lillian, for  
11 that, your inaugural.

12 We have 18 ingredients to go over today.  
13 But first we have to go through the minutes, and  
14 so I would like to have approval of the minutes or  
15 any comments regarding them. Any motion to  
16 approve?

17 DR. BELSITO: So moved.

18 DR. BERGFELD: Second?

19 DR. SHANK: Second.

20 DR. BERGFELD: All those in favor?  
21 Unanimously approved. Before we move onto the  
22 Director's Report, I would like to say at the

1 beginning of the review of the 18 documents, to  
2 have any comments from the Panel members regarding  
3 handling the documents on the computer now since  
4 we are paperless. If there is any improvements,  
5 assistance that you might need, that we might just  
6 voice them to the office basically.

7 And so, Lillian, up to you to give us  
8 the Director's Report and, again, welcome.

9 DR. GILL: Thank you, Wilma. I want to  
10 give you an update on an item we mentioned last  
11 meeting and that you've seen in you reports, and  
12 that's the use of the data on the ECHA website.  
13 For the past three report cycles, CIR did not  
14 include the summaries from the data found on that  
15 website because it was unclear whether or not we  
16 had the legal authority to use that information.

17 When the Council was not able to assist  
18 us in getting permission to use it, what CIR had  
19 been doing is directing the reader, directing the  
20 Panel to the site where the information was found.  
21 We also learned from the Council that  
22 manufacturers would increasingly be submitting

1       their information to the Reach Program so that we  
2       would encounter this frequently in the future.

3               What we asked our legal counsel to do is  
4       give us an opinion on whether or not CIR could use  
5       that summary information. And on the 30th, we did  
6       get an opinion from our legal counsel that said  
7       CIR can use the data on that website. We can cite  
8       the date. We can use the summary information or  
9       summarize the information and include it in our  
10      reports without gaining permission from the  
11      author. Our legal counsel did tell us, though, we  
12      had to abide by the legal requirements for ECHA,  
13      which means that our website, when we link to  
14      their website, will only be to their legal notice.  
15      We can't link to the information.

16             They also said that we could, of course,  
17      use that summary information, the robust summary  
18      information, and that we did have to obtain  
19      permission if it were unidentified third party  
20      data. We did have to get permission. But they  
21      did distinguish between using the summary  
22      information and using the third party -- citing

1 the third party data.

2 We are still figuring out how to cite  
3 the use of the ECHA data. We've gotten some  
4 comments from counsel that says ECHA isn't the  
5 author of the information, so we'll clean that up  
6 in our report. But the good news is we are able  
7 to use that summary information in the reports and  
8 not give the Panel large matrices of information  
9 to go and find. So that should be very helpful.

10 I also wanted to give you an update on  
11 the insufficient data list that was established in  
12 2010. CIR established the two-year window to  
13 allow industry to provide information on that list  
14 of ingredients on insufficient that were concluded  
15 insufficient data, but the ingredients continued  
16 to be used. Last year was the deadline, October  
17 2012. A number of those ingredients were moved to  
18 the "use not supported" category.

19 Once that cleanup took place, six  
20 ingredients remained on that list: Achillea  
21 millifolium, hypericum. There were two PEG  
22 cocomides, the 5 and 15, and the acrylate

1 cross-polymers remain on the list. All but one  
2 have been dealt with. Achillea is the last one,  
3 and that's currently in the process before the  
4 Panel. And as of the end of September, we will  
5 move the acrylate cross-polymers to the "use not  
6 supported" list. So we have finally cleaned up  
7 that entire list of ingredients.

8           And finally, I wanted to mention that  
9 the schedule for our 2014 meetings has been  
10 posted, and the Panel received that schedule  
11 yesterday. I want to highlight that there will be  
12 a new location for CIR meetings. This has been a  
13 very convenient place to hold the meetings, but  
14 starting in -- with our March meeting, the March  
15 17th meeting, our meetings will be held at the  
16 Washington Court Hotel on New Jersey Avenue in the  
17 District. So we will have a change of location  
18 for the meetings and a change of location for the  
19 offices as they will be moving. So at the next  
20 meeting, CIR will be in the midst of moving our  
21 office as well.

22           DR. BELSITO: To where?



1 DR. GILL: Around the corner.

2 (Laughter)

3 DR. GILL: We kept one location that was  
4 convenient that's still in the area.

5 DR. BERGFELD: Well, we hope you get all  
6 of the work done by the next meeting.

7 All right. Well, we're going to proceed  
8 then, and what I introduced was, I'd like to field  
9 some comments from the Panel members regarding the  
10 handling of the documents via jump sticks, and  
11 computer, and paperless. Any comments about any  
12 help that might be needed, or any setup or changes  
13 that would be suggested? Anyone?

14 DR. SHANK: It would be helpful, at  
15 least to me, maybe others, if the reports, not all  
16 of the supplemental stuff, but just the actual  
17 report itself, could be provided not only in PDF,  
18 but also Word. I realize the problem of taking  
19 all the supplemental stuff, which is scanned, and  
20 converting that. That's easy to do in PDF, but  
21 it's hard to convert that to Word. But if the  
22 report itself could actually be provided in both.

1                   It's not a big deal because I convert  
2                   them anyway, and then I provide my comments in  
3                   both PDF and Word. But I find it much easier to  
4                   make comments, rearrange sentences and things in  
5                   Word rather than PDF. So that's just a  
6                   suggestion.

7                   DR. BERGFELD: Don? Paul?

8                   DR. SNYDER: So Kevin has been supplying  
9                   me separate Word documents because I made that  
10                  request right out of the gate. And so, I think  
11                  that should be doable, and I mean, and I find it  
12                  much easy -- much easier to use.

13                  And the only other thing that I would  
14                  add is if in the PDF, I'd rather get multiple  
15                  PDFs, particularly when there's large articles or  
16                  old reports, instead of them all streamed  
17                  together, if they could be separated. I have two  
18                  screens, and I can have lots of things open at one  
19                  time and try to facilitate the review process of  
20                  trying to be in one place and then scroll to  
21                  another place and trying to find something.

22                  So if we could have not quite so many

1 documents strung together in a row, for me that  
2 would be to my advantage.

3 DR. BERGFELD: Dan, any comment?

4 DR. LIEBLER: I'm happy with the current  
5 setup. As you guys know, I'm sort of an early  
6 adopter, but I'm very comfortable with it.

7 And, you know, I don't know if everybody  
8 is familiar with using something like the bookmark  
9 functions and so on in the PDFs that help you jump  
10 around to different parts of the document. It  
11 seems like every time get a new set, they're a  
12 little bit better, more conveniently bookmarked.  
13 So I'd like to compliment the staff on that,  
14 particularly Kevin.

15 DR. BERGFELD: Ron Hill?

16 DR. HILL: Yeah. On that, though, I  
17 don't know how much extra effort I'm actually  
18 asking for, but certain sections, like the  
19 references and maybe the beginning of the figures,  
20 if there's any way that those could be bookmarked  
21 before they're sent out. I don't know. I know  
22 your timelines are very short, so, I mean, adding

1       them on our own, I guess, is always the option.  
2       But that's the most frequent, if they don't get  
3       broken up, and even within a long document. But,  
4       yeah, I guess Adobe allows adding those ourselves,  
5       so I guess we can do that.

6                 DR. BERGFELD: Tom? Jim? We're good.  
7       All right. Well, thank you very much. So we'll  
8       proceed then with the first of the 18, and these  
9       are final reports. And Dr. Belsito is leading off  
10      with the isethionate.

11                DR. BELSITO: Yeah. These are the  
12      isethionate salts. And at the June meeting, we  
13      issued a tentative amended report with a  
14      conclusion of "safe in the present practice of  
15      use, concentration, and cosmetics when formulated  
16      to be non-irritating."

17                There was a question as to whether this  
18      was used in a baby powder that could be  
19      potentially aerosolized. And we subsequently  
20      found that this was not the case, in fact, that it  
21      was used in a wipe. It doesn't change our  
22      conclusion of "safe as used when formulated to be

1 non- irritating," but it does change some of the  
2 discussion concerning the respiratory boilerplate.

3 So there were a few edits, but safe is  
4 used when formulated to be non-irritating.

5 DR. BERGFELD: And that's a motion to  
6 move?

7 DR. BELSITO: Uh-huh.

8 DR. BERGFELD: Second?

9 DR. MARKS: Second.

10 DR. BERGFELD: Any other discussion  
11 regarding this document?

12 DR. BELSITO: Minor changes within the  
13 document, but nothing substantive. We've given  
14 them to the writer.

15 DR. BERGFELD: Good. All right. Seeing  
16 no other comments. I call the question.

17 All those of favor of "safe?"  
18 Unanimous. Thank you. Moving onto the next, Dr.  
19 Marks, alumina.

20 DR. MARKS: In June of this year, the  
21 Panel looked at the assessment of alumina and  
22 aluminum hydroxide and issued a tentative report

1 with "safe" as the conclusion. We're at the stage  
2 of the final safety assessment.

3 In our team discussion, industry had a  
4 number of editorial inputs which they thought were  
5 significant. And so, we felt we should table the  
6 issuing of the final safety report with a "safe"  
7 conclusion until we see industry's edits.

8 DR. BELSITO: Second.

9 DR. BERGFELD: Second. There is no  
10 discussion on the table. So all those in favor to  
11 table, please indicate by raising your hand.

12 Unanimous. So we'll be moving on. Is  
13 there any comment that you want to make  
14 specifically to that table, other than the  
15 industry will supply some information?

16 DR. MARKS: No, unless Halyna wants to  
17 make any comments.

18 DR. BRESLAWEC: I'm not sure that  
19 additional information is necessary; rather, a  
20 rewrite of the document that places the  
21 toxicological information in context.

22 DR. BERGFELD: Thank you. So a

1 clarification of that.

2 All right. Moving onto the next  
3 ingredient then, achillea. Dr. Belsito?

4 DR. BELSITO: Yeah. The June meeting,  
5 we had some new sensitization data, .04 percent,  
6 which allowed us to evaluate the safety of these  
7 ingredients at their highest use concentration.  
8 And we agreed that they were "safe as used." We  
9 also discussed the LLNA on a mixture and felt that  
10 that was somewhat of a problematic way of  
11 assessing sensitization of mixtures.

12 We then raised the issue of having  
13 multiple botanicals in a single product that may  
14 contain things like sensitizers, that the total  
15 impact might cause problems in a final  
16 formulation, heavy metals, et cetera, things like  
17 that. And we looked at some boilerplates, which I  
18 guess we'll get to later.

19 Having said all that, we felt that the  
20 conclusion that we reached was "safe in the  
21 present practice of use, and concentration, and  
22 cosmetics." The Council raised the issue of

1       adding a bit by saying when formulated to be  
2       non-sensitizing, and our team actually thought  
3       that was a good idea because it will reflect back  
4       to the discussion regarding potential allergens,  
5       sensitizing allergens, in that botanical product  
6       that could be stacked upon other botanicals to  
7       create an issue.

8                 So a little bit of a change in the  
9       conclusion, "safe when formulated to be  
10      non-sensitizing." I'm not a legal expert, so I  
11      don't know if this has to go out for another  
12      60-day final or whether we are done with it.

13                DR. BERGFELD: Well, let us make a  
14      ruling on the safety, and then we'll discuss that.

15                DR. BELSITO: Okay. "Safe when  
16      formulated to be non-sensitizing."

17                DR. BERGFELD: Is there a second?

18                DR. MARKS: Second.

19                DR. BERGFELD: All right. I'm going to  
20      call for the vote then.

21                All those in favor of "safe?" Okay,  
22      unanimous. Can we get an opinion on whether it



1 has to go out again for comment? Halyna maybe or  
2 Lillian?

3 DR. GILL: I think we've changed that  
4 conclusion. It went out originally as a safe  
5 conclusion, and with the change of "conclusion," I  
6 think we will have to re-issue that for comment.

7 DR. BERGFELD: So this will go out again  
8 with the change of "conclusion." I think that's  
9 reasonable.

10 DR. BELSITO: Uh-huh.

11 DR. BERGFELD: I'd like to point out,  
12 too, that we had this discussion yesterday that  
13 this is only the second time that we have put the  
14 restriction into the conclusion of  
15 "non-sensitizing." Before it's been  
16 "non-irritating," but this is "non-sensitizing," a  
17 little bit different to make everybody aware of  
18 that.

19 DR. MARKS: Yeah, and our team really  
20 wanted to have that elucidated, as you've  
21 explained, Don, in the discussion, because it is  
22 unusual to say. The idea of combining botanicals

1 and the level of an ingredient might then rise to  
2 the threshold of being sensitizing, I think, is  
3 important to explain in the discussion.

4 DR. HILL: I also liked it because it  
5 picked up the possibility of variations in source  
6 materials that some -- potentially could occur in  
7 this case.

8 DR. BERGFELD: Any other comment  
9 regarding this? None? All right. We've ruled on  
10 that as "safe," and we're going to send it out  
11 again for a second look at the conclusion.

12 We're looking now at the next  
13 ingredient, tromethamine. Dr. Marks?

14 DR. MARKS: So in June of this year, we  
15 issued a tentative report for the tromethamine  
16 ingredients, and the conclusion was "safe." I  
17 move that we issue a final safety assessment for  
18 these ingredients with a conclusion of "safe."

19 DR. BELSITO: Second.

20 DR. BERGFELD: Second. Any further  
21 discussion? Yes, Don?

22 DR. BELSITO: Yeah. We had in our

1 discussion taken out the issue of the nitrosation  
2 boiler point because it was said that there were  
3 no secondary amines. But on page 16 of the PDF,  
4 it clearly says as impurity, secondary amines, and  
5 hydros were present at a maximum.05 percent way,  
6 and nitrosamines at 50 parts per million. So I  
7 thought we had to add back that nitrosation  
8 language into the discussion.

9 DR. BERGFELD: Comment? Jim? Fine?  
10 Any other comments? Ron Hill?

11 DR. HILL: I'd just like, and this will  
12 probably be back to industry. There was a comment  
13 in here about unstabled freezing, which chemically  
14 makes no sense to me. And so, I'm thinking the  
15 instability has more to do with either crystalline  
16 form or hydrosopicity or something stable at room  
17 temperature. It can't be unstable chemically from  
18 freezing.

19 So if we could get some clarification of  
20 that language since this is going out with my name  
21 on it before it gets into the Journal, that would  
22 be great.

1 DR. BERGFELD: All right. Any other  
2 comments before we vote?

3 All those in favor of a "safe" with  
4 these changes? Thank you. Unanimous. Moving  
5 onto the next ingredient then is the hair dye.  
6 Dr. Belsito?

7 DR. BELSITO: Yes. This is  
8 hydroxypropyl bis and hydroxyethyl  
9 phenylenediamine. And in June, we noted that this  
10 compound had minimal penetration through the skin  
11 and virtually no toxicity when used as a hair dye.  
12 And came to a "safe as used" conclusion, and we'll  
13 maintain that and go forward as "safe as used" as  
14 a hair dye.

15 DR. BERGFELD: That's the motion.  
16 Second?

17 DR. MARKS: Second.

18 DR. BERGFELD: Any further discussion?  
19 Yes, Don, please?

20 DR. BELSITO: Well, just it's a  
21 boilerplate issue -- let me see if I can come to  
22 it -- on, again, page 20 of the PDF, I guess I've

1 missed this before. But it says, "The Panel noted  
2 that use of oxidated hair dye formulations  
3 involves exposures to precursors and coupling  
4 agents, as well as to their reaction products.  
5 While reaction intermediates may be formed, human  
6 exposure is to the precursors and coupling agents  
7 and to reaction products and not to reaction  
8 intermediates."

9           And I thought that last sentence, "While  
10 reaction intermediates may be formed, human  
11 exposure is to the precursors and coupling agents  
12 and to reaction products, not to reaction  
13 intermediates," should be deleted because, A,  
14 there is exposure to the intermediates; they're  
15 formed on the scalp, and, B, at least for the case  
16 of paraphenylenediamine, Brandowski's base, which  
17 is an intermediate, is thought to be a sensitizer,  
18 at least in some people.

19           So that statement is not correct in that  
20 sentence, and the boilerplate should be deleted.

21           DR. BERGFELD: Any other comments?

22           DR. HILL: I certainly would agree with

1 that.

2 DR. BERGFELD: Okay. So no other  
3 comment, and we can make that change. I'll call  
4 for the vote.

5 All those in favor of "safe?" Thank  
6 you. It's "safe" unanimously. Moving onto the  
7 next ingredient, Dr. Marks, is sulfosuccinates.

8 DR. MARKS: So we have before us a final  
9 amended safety assessment, a draft final amended  
10 safety assessment of dialykl sulfosuccinates.  
11 There are eight ingredients. You previously found  
12 them to be "safe when formulated to be  
13 non-irritating."

14 I move that we issue a final amended  
15 assessment with that conclusion, "safe when  
16 formulated to be non- irritating."

17 DR. BELSITO: Second.

18 DR. BERGFELD: Second. Discussion?  
19 Seeing none, I call for the vote. All those in  
20 favor of "safe?" Thank you. Unanimous. Moving  
21 onto the next ingredient, Dr. Belsito, is the  
22 PEG-PPG ethers.

1 DR. BELSITO: Okay. So the June  
2 meeting, we decided we could add 131 alkyl PEG-PPG  
3 ethers into this report, bringing some summary  
4 data from the prior reports on PPGs and PEGs. A  
5 little bit in the discussion about dioxane as a  
6 contaminant, but our lack of our concern due to  
7 the low levels, and go forward with a "safe as  
8 used" conclusion for these ingredients.

9 DR. BERGFELD: A motion? Is that a  
10 motion, or do you have other things to add?

11 DR. MARKS: Yeah. I would just amend  
12 the motion slightly.

13 DR. BELSITO: "When formulated not to be  
14 irritating."

15 DR. MARKS: Correct. Second.

16 DR. BERGFELD: Second. Any other  
17 discussion regarding this ingredient?

18 Seeing none, call for the question. All  
19 those in favor, raise your hands? Thank you.

20 Unanimous. And moving onto the next is methyl  
21 glucose. Dr.

22 Marks?

1 DR. MARKS: In June of this year, the  
2 Panel issued a tentative report for the methyl  
3 glucose polyethers and esters with a "safe"  
4 conclusion. We're at the stage now to issue a  
5 final report.

6 I move that we do that with a "safe"  
7 conclusion.

8 DR. BERGFELD: Is there a second?

9 DR. BELSITO: Second.

10 DR. BERGFELD: Second. Any discussion?

11 DR. BELSITO: I'm still having problems  
12 navigating through this.

13 DR. MARKS: Well, our -- there were  
14 several paragraphs in the discussion, and we felt  
15 the revised paragraph on page 35 was the better of  
16 the two starting with "Wilbur." I think I caught  
17 that correctly, right, Ron Shank?

18 DR. SHANK: Yes.

19 DR. MARKS: And then there was some  
20 comments in the memo which we felt the  
21 reproductive and development toxicity we felt were  
22 fine.



1 DR. BELSITO: Yeah. I guess our only  
2 comment was in the language of the conclusion  
3 where it said -- there we go -- the "CIR Expert  
4 Panel concluded that these cosmetic ingredients,"  
5 and then there was a list. I just thought that  
6 the -- instead of "these cosmetic ingredients,"  
7 the family should be referenced there, and it  
8 should be "the following methyl glucose polyethers  
9 and esters."

10 DR. BERGFELD: Is that agreeable?

11 DR. MARKS: Yes.

12 DR. BERGFELD: Yes. Any other  
13 additions, edits?

14 DR. BELSITO: Minor edits.

15 DR. BERGFELD: Discussion? Minor edits?  
16 Ron Hill?

17 DR. HILL: Yeah, I think it's a minor  
18 edit. But in the discussion -- let's see, I guess  
19 it would be -- it's the second full paragraph on  
20 the last page of the discussion. It says,  
21 "Unlikely that systemic toxicity would result from  
22 repeated ingestion." I'm wondering if we could

1 change that to "repeated incidental ingestion from  
2 reported cosmetic uses," or something like that.  
3 I'm just trying to figure --

4 DR. BERGFELD: That sounds reasonable.

5 DR. BELSITO: Well, we actually -- that  
6 was one of our edits --

7 DR. HILL: Okay. All right.

8 DR. BELSITO: -- that sentence. We  
9 said, "The use concentration reported up to one  
10 percent are considered low, such that toxicity  
11 would not result from" --

12 DR. LIEBLER: "Cosmetic use of  
13 lipsticks."

14 DR. BELSITO: "Cosmetic use in  
15 lipsticks," thank you. And I think the word is  
16 easier.

17 DR. SNYDER: Yeah. Yeah, good.

18 DR. BERGFELD: So this addresses the  
19 same. So the preference is Don's edit?

20 DR. HILL: I like his, yes.

21 DR. BERGFELD: Thank you. Any other  
22 comments? Seeing none, I call the question. All

1 those in favor, please indicate by raising your  
2 hand. Thank you. Unanimous.

3 Then moving onto the last in this final  
4 report group, the polyquats. Dr. Belsito?

5 DR. BELSITO: Okay. At the June  
6 meeting, we issued a tentative report with a  
7 conclusion of "safe in the present practice of use  
8 and concentration in cosmetics." We received some  
9 wave two data indicating that polyquaternium-

10 Does not contain an acrylic monomer, and  
11 that the polyquaternium-39 contains less than one  
12 part per million acrylamide monomer. So it's  
13 satisfying any concerns we had about the presence  
14 of some unreacted acrylamide in these products.  
15 And so, we're very comfortable going ahead with  
16 "safe in the present practice of use and  
17 concentration" for these two.

18 DR. MARKS: Second.

19 DR. BERGFELD: Second. Any other  
20 comments, edits, that are important?

21 Seeing none, call the question. All  
22 those in favor, please indicate by raising your

1 hands. Thank you. Unanimous. Now, we're going  
2 to move on to Reports Advancing.

3 And this first one here is the  
4 phytosterols by Dr. Marks.

5 DR. MARKS: I suspect that now we'll get  
6 into discussion among the different -- the two  
7 teams as we move onto the next set of ingredients.

8 So this is the first time seeing this  
9 report. There are 27 ingredients. We felt at  
10 this point there were no safety issues. These  
11 ingredients are ubiquitous in plants, part of the  
12 diet, so we move to issue a tentative report with  
13 a phytosterols as "safe as used."

14 DR. BELSITO: Second.

15 DR. BERGFELD: Second. Any comments,  
16 other comments? Don?

17 DR. BELSITO: Yeah. We just thought  
18 that there might be additional literature out  
19 there on betacytosterols that didn't seem to be  
20 captured or searched. And we just ask that that  
21 additional information be brought into the  
22 document when we look at it.

1           The only other comment is that we  
2           thought that diosgenin should be deleted from the  
3           -- this report as its present in other botanicals,  
4           sort of as our approach to whether to include an  
5           ingredient, specific chemical ingredient, in a  
6           group of mixtures like this. If it was present  
7           only in that botanical product, a significant  
8           amount, then -- and it had cosmetic use, it might  
9           be reasonable to include it. If it were present  
10          in other botanicals, had no apparent cosmetic use,  
11          not to include. So we decided to drop diosgenin.  
12          It's already been reviewed anyway.

13                 DR. BERGFELD: That's fine with your  
14                 team?

15                 DR. MARKS: That's fine.

16                 DR. BERGFELD: All right. Any other  
17                 discussion?

18                 DR. BELSITO: In the discussion, we need  
19                 the usual plant caveat that we've established  
20                 under the boilerplate. We do not really need a  
21                 botanical discussion because this doesn't really  
22                 seem to have any of the sensitizers that we worry

1 about in other plants, such as achillea.

2 DR. BERGFELD: Agreeable?

3 DR. MARKS: Yes.

4 DR. BERGFELD: Okay. Any other  
5 comments? Ron Hill?

6 DR. HILL: This is really an editorial  
7 thing, but I'm not sure which all staff members  
8 are involved besides Lillian Becker. In referring  
9 to the PEG soy report, I just wanted to make sure  
10 that in the document that it's clear that the data  
11 that's being pulled in basically for the purposes  
12 of read-across doesn't pertain to the pegulated  
13 materials, which are different. So I just want to  
14 make sure whoever is involved in the writing of  
15 this that we're not suggesting that the pegulated  
16 materials assist with read- across in any way  
17 because that's not reasonable to think.

18 DR. BERGFELD: Okay. I will call then  
19 for the question.

20 All those in favor of a "safe"  
21 conclusion and going forward with this particular  
22 document, please raise your hands.

1                   Thank you. It's approved with those  
2 editorial comments and general comments.

3                   The next item is rosmarinus. Dr.  
4 Belsito?

5                   DR. BELSITO: Yes. This is the first  
6 time we're looking at these 12 ingredients of  
7 rosmarinus officinalis. And again, we thought  
8 that rosmarinic acid should be removed from this  
9 report. It has no reported uses, and, therefore,  
10 we had no sense at what concentration it might be  
11 used. And we also got some soft information that  
12 it may be present in other botanical products as  
13 well.

14                   Having said that, we also thought that  
15 the wax should be deleted. Dr. Liebler may want  
16 to comment, but he felt this was chemically  
17 dissimilar from the other components of rosmarinus  
18 officinalis that we were reviewing. And you can  
19 comment. I'll continue going.

20                   The water --

21                   DR. BERGFELD: He's ready to comment.

22                   DR. BELSITO: You ready?

1 DR. LIEBLER: I'd just make the comment  
2 that I'm not going to comment.

3 (Laughter)

4 DR. BELSITO: Okay. So anyway, he  
5 thought the wax was dissimilar, so we're removing  
6 those two ingredients. And then it appears that  
7 the water extracts are -- may be used only as  
8 fragrance ingredients. We're waiting for some  
9 information from RIFM. If they are, then it's not  
10 in the purview of this Panel to review them, and  
11 those would be deleted.

12 We had a lot of data on the whole plant,  
13 a little less on component parts. But we felt  
14 that by and large the plant data covered the  
15 compositions that we needed. And that -- but it  
16 was still insufficient for sensitization of the  
17 leaf extract at 10 percent. And since we're going  
18 with an "insufficient," if the composition of the  
19 flower, which we didn't have a lot of information  
20 on, was available, we would like to see that. In  
21 terms of helping the Panel develop a discussion,  
22 we would need the pesticide heavy metal inhalation



1 boilerplates.

2                   And the specific components of concern  
3 are caffeic acid, thujone, and terpenes,  
4 especially linalool/linalyl acetate acetate,  
5 limonene methyl eugenol. And then the discussion  
6 of the fact that there were reproductive effects  
7 on both males and females, but at very high doses  
8 that weren't relevant to use in a cosmetic  
9 product.

10                   So developing a discussion, hopefully  
11 going ahead with eventually a "safe as used." But  
12 at this point, sensitization of the leaf extract  
13 at 10 percent, composition of the flower, if  
14 available.

15                   DR. BERGFELD: So it's an insufficient  
16 notice --

17                   DR. BELSITO: Insufficient notice.

18                   DR. BERGFELD: -- that you're making a  
19 motion for. Is there a second?

20                   DR. MARKS: Second.

21                   DR. BERGFELD: Any other comments about  
22 the needs?

1 DR. MARKS: I think Don has addressed  
2 most of them. We were concerned in the text that  
3 said with a reference with a PDR herbal that  
4 rosemary should not be used in pregnancy. So you  
5 may have addressed it, Don, in terms of your  
6 saying, yeah, the amount should not be a safety  
7 issue, but we want that clarified. Ron Shank, if  
8 you want to comment more?

9 DR. SHANK: Yeah. I'd like to know what  
10 the writers of the PDR herbal had in mind when  
11 they said that rosemary preparation should not be  
12 used during pregnancy. I think that needs to be  
13 explained.

14 DR. HILL: And I had added to that the  
15 concern that we didn't have any reproductive  
16 toxicology data on the oil. And I'm not sure we  
17 have enough composition on the oil specifically to  
18 know how that relates to the other ingredients  
19 that we're studying in this group. So it's sort  
20 of a combined concern between those two things.

21 DR. MARKS: So I think it's just delve  
22 more into the pregnancy issue and the insufficient

1 data notice.

2                   And then the last thing was Ron Hill  
3 wanted to know what was meant by the manufacturer  
4 when you used "deodorize." So again, I think  
5 that's a minor point, but it would be perhaps nice  
6 to clarify that. If you want to comment, Ron  
7 Hill, you may.

8                   DR. HILL: Just depending on how that  
9 process is actually conducted. I mean if it's  
10 just absorption with activated carbon, then that  
11 presents no concerns whatsoever. But if there is  
12 chemistry involved, for example, some sort of  
13 bleaching, then that creates the potential for  
14 creating new chemicals that we might like to know  
15 something about.

16                   DR. MARKS: So I think the two big data  
17 points we need is either a max or an HRIPT for the  
18 leaf extract at 10 percent. Undiluted, the leaf  
19 extract is a sensitizer, so is it safe at 10  
20 percent? And then the second is clarify the issue  
21 of pregnancy and repro and development toxicity.

22                   DR. BERGFELD: Have we captured it all

1       then? Is there something that's been left out?

2       No?

3                   DR. MARKS: No.

4                   DR. BERGFELD: Lillian, are you  
5       comfortable with what we've got in that list,  
6       because it went on and on.

7                   DR. GILL: I have it.

8                   DR. BERGFELD: Okay. Now, I call for  
9       the question. It's going out as an insufficient  
10      data notice.

11                   All those in favor? Thank you.  
12      Unanimous. The next item on the list is the alkyl  
13      betaines.

14                   Dr. Marks?

15                   DR. MARKS: So this is the first time  
16      we've seen these 11 ingredients. Our team felt  
17      all 11 were okay. When looking at the data,  
18      particularly the summary sheets that we received  
19      yesterday, we felt we could move forward with a  
20      tentative report, "safe as used." And that's a  
21      motion.

22                   DR. BERGFELD: Is there a second from

1 the Belsito team?

2 No? All right. Any comments to be  
3 made?

4 DR. BELSITO: Yeah. We want to  
5 congratulate Christina for trying to get through  
6 the ECHA site. I've also tried to get through it,  
7 and it's a series of clicking and clicking and  
8 trying to sort through lots of information. But  
9 we've not yet gone through the betaine report  
10 completely. We have gone through the C12 14 aklyl  
11 betaines.

12 And I think the data will support  
13 safety, but we felt that we were still lacking  
14 impurities in manufacturing. And we weren't able  
15 to obtain that, at least in our brief attempt  
16 yesterday to look at the ECHA site since this is  
17 the first time that we've seen it. We haven't  
18 seen all the data that would be available on  
19 betaine itself.

20 We thought we would go "insufficient for  
21 impurities in manufacturing" and get all of the  
22 data from the ECHA site into a document and look

1 at it again.

2 DR. BERGFELD: Dr. Marks?

3 DR. MARKS: So I'll ask Ron Shank and/or  
4 Tom to comment on the manufacturing and  
5 impurities.

6 DR. SHANK: I think we have sufficient  
7 test data to cover the safety of the use of these  
8 in cosmetics. And I don't think the method or  
9 manufacture or impurities would help me, but it  
10 might help the chemists.

11 DR. BERGFELD: Dan?

12 DR. LIEBLER: I felt that -- I didn't  
13 expect that there would be anything remarkable in  
14 that information, but we just don't have it, and  
15 we normally have it in our reports. And it seems  
16 like it's gettable information. And since the  
17 getting process has just been formally approved  
18 now for us to be able to access the rest of these  
19 data, I think we should do that.

20 DR. BERGFELD: Ron Hill?

21 DR. HILL: I rather -- I'm operating on  
22 the assumption that n-dimethylglycine is being

1 alkylated, and that's the way these things are  
2 made. So I guess the only end result issue in my  
3 mind on the impurities, if that's true, but I'm  
4 conjecturing, and it would be nice to have that  
5 confirmed, is if there is an n-dimethylglycine, I  
6 guess is are nitrosamines a worry in that  
7 particular case?

8 But I also had opposition method of  
9 manufacture down here, and it was a method of  
10 manufacture question.

11 I still feel strongly that betaine  
12 itself should be separated from these long chain  
13 alkyl betaines because the data from one is not  
14 relevant to another. And I think toxicologically,  
15 they should be separated. I think it would make  
16 for a nice clean report on the betaine and a nice,  
17 much cleaner and much more useful in terms of  
18 read-across report if we just used then the  
19 long-chain alkyl grouping. And there was at least  
20 one opinion from industry that suggested that  
21 that's how we should've gone on this.

22 So I realize -- I don't think that that

1 would demand much more work from the staff, but  
2 that's just my thinking on it. So I'll leave that  
3 up to you all.

4 DR. MARKS: So I have no problem in  
5 terms of "insufficient data." I mean, that's -- I  
6 think we didn't think it would really change the  
7 conclusion. Neither do you. But let's get it  
8 because it is a usual part of the safety  
9 assessment. Is that fine, Ron Shank? Yeah.

10 DR. SHANK: Yes.

11 DR. BERGFELD: Since we're in  
12 discussion, Halyna?

13 DR. BRESLAWEC: Yeah. "Insufficient  
14 data" is, I think, generally used when you don't  
15 know if the information is out there. And I think  
16 based on your discussion, it's pretty clear that  
17 the information is there, but it has not been  
18 accessed. And so, we would recommend your  
19 considering tabling it. Obviously your decision.

20 DR. BERGFELD: Don't

21 DR. BELSITO: I'm not sure, Halyna, is  
22 you're saying the information is out there and



1       it's in the ECHA report, we really looked and it  
2       didn't seem to be. It seemed to be a whole bunch  
3       of different regulations as to safety precautions  
4       in terms of manufacturing with all of these codes,  
5       procedural codes. It didn't give a this is  
6       reactive with this, and this, and these are the  
7       impurities. It was not straightforward like that.

8                   And, you know, I tried going through  
9       some tabs last night. Christina was tabbing away  
10       during our meeting yesterday. I don't think that  
11       information as we would want it is there, but it  
12       may be. I mean, there are so many tabs to try and  
13       go through, and you tab on it, and there are  
14       multiple tabs below it. And that ECHA, it's very  
15       difficult to get through it.

16                   DR. BERGFELD: Carol?

17                   MS. EISENMANN: I saw in the composition  
18       section for the mixture was that sodium glycelate  
19       and sodium chloride were other components that had  
20       sold as 20 to 40 percent active, that they made  
21       the powder just for testing. That's what I saw  
22       under composition.

1                   And, yes, under manufacturer, you know,  
2                   it's done in a closed procedure, and then mostly  
3                   the focus was use in that area rather than  
4                   manufacture.

5                   DR. BELSITO: Right.

6                   MS. EISENMANN: But there was a little  
7                   bit of information on composition, in the  
8                   composition section. It didn't give amounts, but  
9                   it gave what I just said.

10                  DR. BERGFELD: Ron Hill?

11                  DR. HILL: I have to say I appreciate  
12                  that there is a desire to supply that kind of  
13                  information in a way that doesn't give away trade  
14                  secrets, and so I appreciate that that's always  
15                  true with manufacturing processes. And so, if we  
16                  can get how to get the information we're looking  
17                  for without having to compromise something, that  
18                  would -- I'm just tossing out I appreciate that  
19                  aspect of it.

20                  DR. BERGFELD: Halyna, do you care to  
21                  comment again? No? So we have no motion on the  
22                  table. We have one suggestion of tabling. And,

1 Halyna, we have another for insufficient. I'd  
2 like to hear a motion.

3 DR. BELSITO: I'd like to move this  
4 ahead, and hopefully we can get that information  
5 if it's not available on the ECHA website from one  
6 of the manufacturers at the next meeting, and be  
7 able to go with this as a final say rather than  
8 slowing down the process by tabling it, I mean,  
9 because there's a huge amount of information.

10 And, you know, it's always possible, as  
11 Ron said, that when we look at all of the studies,  
12 and we haven't seen all of the studies, you know,  
13 that we may feel that, you know, there are no  
14 concerns about impurities because at the levels  
15 they're used in these studies, we're seeing no  
16 toxic effects. And those are levels are higher  
17 than what we're using in cosmetics or whatever.

18 But I just don't think we've had  
19 adequate time to look at all the information, and  
20 there clearly is one piece of information that  
21 seems to be missing, and that's method of  
22 manufacturing impurities. So I'd like to go ahead

1 with an "insufficient" and move this along.

2 DR. BERGFELD: And that's a motion.

3 DR. BELSITO: Yes.

4 DR. BERGFELD: Is there a second?

5 DR. MARKS: Second.

6 DR. BERGFELD: Ron Hill?

7 DR. HILL: Yeah, one last comment is  
8 that besides the n-dimethylglycine, which is  
9 probably in there nitrosating potential, if the  
10 reaction is done in the way I think it is, then we  
11 have long chain alkylating agents, and that would  
12 present a concern if they were there. So there's  
13 some indication as to how those are removed, if  
14 that's the way it's done, would also be helpful to  
15 us.

16 And that's the kind of toxicology where  
17 you might not have seen any incident in the  
18 studies, but that still could be there. And over  
19 time, long duration use of some product with such  
20 a thing present could present a hazard more subtle  
21 than --

22 DR. BERGFELD: So you're supporting the

1 methods of manufacturing the request.

2 DR. HILL: Yes, at least get some  
3 parameters for what sorts of things we're  
4 interested in finding out about.

5 DR. BERGFELD: Any other discussion?  
6 No? I'm going to call the question for  
7 "insufficient data notice." Unanimous? All  
8 right. There was something put on the table about  
9 separating this group of ingredients. Any support  
10 for that?

11 DR. LIEBLER: Yeah. I think Ron's point  
12 about betaine having somewhat different  
13 characteristics in terms of polarity,  
14 hydrophobicity is chemically -- I agree with him  
15 on the chemistry. But I don't think it is worth  
16 separating that out and to do a separate report.  
17 And largely because there are a lot of uses for  
18 betaine itself.

19 And the issue is more a matter of degree  
20 rather than a totally different profile, use  
21 profile, and physiochemical -- physical chemical  
22 properties. So I think these all should stay

1 together.

2 DR. BERGFELD: Thank you. Any other  
3 comments related to this?

4 No? We'll move on then to the next  
5 ingredient, which are the wheat proteins. Dr.  
6 Belsito?

7 DR. BELSITO: Yes. Hydrolyzed wheat  
8 protein and hydrolyzed wheat gluten. So at the  
9 last -- at the March meeting actually, we were  
10 asked to look at a whole group of hydrolyzed  
11 proteins, and we said, whoa, we just can't do  
12 this. So let's split them down and let's start  
13 with a hydrolyzed protein of greatest use, which  
14 was wheat, which is what we're doing now.

15 And at that time, we had issued an  
16 insufficient data announcement requesting methods  
17 of manufacturing, composition, characterization  
18 specifications for hydrolyzed wheat protein and  
19 when wheat proteins were combined with other amino  
20 acids. We're particularly concerned about reports  
21 coming out of Japan about hydrolyzed wheat  
22 proteins causing reactions in soaps. So we've

1       gotten a lot of new data, including some wave two  
2       data from the Council or at least one of the  
3       manufacturers pointing out various things.

4                 We looked at this report. We thought it  
5       was a very well-written report. And in terms of  
6       reactions to wheat proteins, it appears that if  
7       the peptide length is less than or equal to 30, it  
8       will not cross link and bind IGE and cause  
9       reactions. However, it also appeared that if you  
10      tape strip skin, at least in mice, you could  
11      sensitize them to these wheat proteins. And it  
12      wasn't clear the molecular weight or amino acid  
13      length of the hydrolyzed wheat proteins that were  
14      used in those studies. And it also appeared that  
15      when applied to mucus membranes of the eye, you  
16      could also sensitize individuals.

17                So we felt that we could go ahead with a  
18      "safe as used," minimize peptide lengths above 30  
19      amino acids long, but that we would need to put a  
20      restriction that this not be used on damaged skin,  
21      and with a robust discussion in the discussion  
22      about the sensitization of mice on tape stripped

1 skin, that it should not be used in products that  
2 could contact the mucus membranes, which would  
3 actually eliminate a little over 100 currently  
4 registered products that could, and not in  
5 products that could be inhaled.

6 To eliminate those restrictions, i.e.,  
7 damaged skin, mucus membranes, inhalation, what we  
8 really need to know is can you sensitize to the  
9 hydrolyzed wheat proteins with amino acids that  
10 are 30 or smaller in size. And that we don't know  
11 because the studies that were done on mice that  
12 were sensitizing them were 45 --

13 DR. SNYDER: Forty to 50.

14 DR. BELSITO: Four hundred and fifty?

15 DR. SNYDER: Forty to 50.

16 DR. BELSITO: Forty to 50 kilodaltons,  
17 which are much larger than 30 amino acids. But we  
18 don't know whether amino acids will sensitize. So  
19 the issue here is that we know that you can  
20 apparently eliminate elicitation with a cutoff at  
21 30, but do you eliminate sensitization, and that's  
22 the information we need to know to eliminate those



1 restrictions on damaged skin mucus membranes and  
2 inhalation.

3 DR. SHANK: But you still say it's safe?

4 DR. BELSITO: Safe, but not to be used  
5 in those products.

6 DR. SHANK: With all of that?

7 DR. BELSITO: Yes. We said formaldehyde  
8 formalin was "safe with elimination of hair  
9 straightening products." I mean, this can be  
10 safely used in a shampoo if they're less than 30  
11 amino acids.

12 DR. BERGFELD: Dr. Marks?

13 DR. MARKS: So we struggled with how to  
14 deal with this, and we're quite concerned about  
15 the type one reactions and anaphylaxis. And we  
16 didn't quite understand or felt we had the  
17 expertise to come to a conclusion.

18 So we actually suggested tabling this  
19 report and ask that an expert on wheat type one  
20 reactions to speak to the Panel and sort through  
21 this and help us arrive at a conclusion. There  
22 are over a thousand uses. This is very important.

1                   There's been these serious adverse  
2                   events, particularly in Japan, and so we felt we  
3                   needed more expertise. But if your team feels  
4                   that -- comfortable moving forward, that will --  
5                   our team will discuss it, although I'm not sure  
6                   we're prepared to move forward as "safe."

7                   DR. BERGFELD: Ron Shank, any comment?

8                   DR. SHANK: I find the immunotoxicity  
9                   data confusing, and I don't have sufficient  
10                  expertise in immunology to tease this out. These  
11                  ingredients are widely used and have been, but we  
12                  have not seen outside of Japan apparently this  
13                  very serious type one response. So before we  
14                  could go to safety, I would say we need to hear  
15                  from an expert in this field.

16                  DR. BERGFELD: Comment, Paul?

17                  DR. SNYDER: I don't have a problem with  
18                  having an expert come in, but I think as Don  
19                  stated, we labored over this. I think that when  
20                  you finally look at the data, I think the data on  
21                  the elicitation is quite good, but there's a  
22                  cutoff point.

1                   But the question we don't know is, at  
2                   what point do you get sensitized by peptides,  
3                   certain peptides? And that's the critical thing  
4                   that we don't know. And if we knew that, then we  
5                   could tell them to formulate, to not contain  
6                   those, and then that would resolve all of our  
7                   issues.

8                   But I don't have a problem. If it would  
9                   help others understand the immunology behind it,  
10                  I'm okay with that.

11                  DR. BERGFELD: Dan?

12                  DR. LIEBLER: So I think the suggestion  
13                  is not a bad one of having an expert come and  
14                  speak with us because I think if you look at this,  
15                  almost everything we have in the report supports  
16                  safety, as long as the size distribution of the  
17                  hydrolyzed peptides is kept below some threshold  
18                  amount. And 30 seems to be -- we're using it as a  
19                  kind of a magic number, but it's probably  
20                  somewhere in that neighborhood.

21                  The thing that really throws a wrench in  
22                  the works in our interpretation is this mouse

1 study, the tape stripping mouse study. And, you  
2 know, admittedly we have to, because we're  
3 uncertain of the circumstances of those  
4 experiments, we're having to kind of work around  
5 that in our, you know, proposed assessment here,  
6 as Don laid out.

7 So it might be if we do have an expert  
8 come and talk with us, I think one thing we would  
9 to do is have that person really give us their  
10 input on what they -- how they would asses this  
11 mouse study. Now, there might be -- it might not  
12 be possible for them to fully assess it if we  
13 cannot know what the position of the test material  
14 was in that experiment. I think it's a big --

15 DR. BELSITO: (off mic)

16 DR. LIEBLER: Well, I don't see it very  
17 well, you know, very well laid out. I suspect  
18 it's not known well enough to get to our major  
19 point, because I think the characterization of the  
20 size of the proteins used is not adequate.

21 So, you know, it's a big unknown. It  
22 throws a wrench in the works, and it perhaps would

1 allow time for any more data to emerge if that's  
2 possible.

3 DR. BERGFELD: Ron Hill?

4 DR. HILL: Yeah, because the interesting  
5 complication here is the suggestion that smaller  
6 peptides are either via disulfide linkages or some  
7 other, they say, entangling. I don't know about  
8 that. But I certainly can envision through  
9 essentially repolymerization, but through  
10 disulfide linkages that we're building up big  
11 enough molecules, and then they come to the end  
12 where they say if we keep everything below 3,000  
13 molecular weight, theoretically that should solve  
14 the problem. I have to think my way through that  
15 theory and really read in depth the references  
16 list that's here and anything else I can find.

17 And then, so the characterization issue,  
18 that's part of it because on the day of the  
19 testing, if that process is actually occurring in  
20 a sample, then you really need to know right then  
21 by some means what's actually in there to be  
22 tested. And I thought on the tape stripping, it

1 sort of is in accord with the data that suggests  
2 that on intact skin, in order to get much  
3 sensitization, there's some words barely in there  
4 for detecting, I think, it was IgE. So I'm a  
5 little concerned what does "barely" mean.

6 But in order to get robust  
7 sensitization, it was the SDS, the surfactant,  
8 that allowed, I assume, compromising the barrier  
9 function of the skin that allowed these things to  
10 do something. And I guess this is the first I had  
11 really encountered how much -- to what extent if I  
12 have a shampoo that has this stuff in it, I rinse  
13 it off, is it maybe contacting the mucus membranes  
14 in my eye. I even got to thinking, if you're  
15 living in a place where the showers don't work as  
16 well as they did in this building, you know, that  
17 maybe you're leaving more on than if you can rinse  
18 well. So that is a little crazy, but not maybe  
19 that crazy when we're talking anaphylactic  
20 reactions. So there were unknown parameters, I  
21 agree.

22 DR. BERGFELD: So, Don?

1                   DR. BELSITO: Again, you know, the issue  
2                   in Japan, as you just pointed out, was with soap.  
3                   And so, you're having that surfactant. You're  
4                   having damage. I mean, these proteins -- stratum  
5                   corneum is going to an excellent barrier for any  
6                   protein.

7                   So what you're concerned about is areas  
8                   of skin with no stratum corneum or a very weak  
9                   stratum or damaged stratum corneum, and mucosa,  
10                  which has no stratum corneum. So that's when  
11                  you're going to start absorbing the proteins.

12                  So, I mean, our restrictions are very,  
13                  very extensive. And probably industry is, you  
14                  know, going to hopefully come forward with some  
15                  data to show us that, you know, with the  
16                  restricted size length, you can sensitize. But, I  
17                  mean, quite clearly, you know, in terms of an  
18                  expert, I'm not sure what an expert is going to  
19                  tell you that's not in this report. When you get  
20                  below 30, you can't get, you know, dynamic  
21                  cross-linking of IgE, and you can't trigger mass  
22                  cells, period and amen. Above that, you can.

1                   And so, you know, IgE reactions are  
2 going to occur with larger molecules. So if  
3 you're concerned about the reaction to sensitized  
4 individuals, limiting the size will satisfy that.

5                   The question really is, can you  
6 sensitize an individual with those smaller  
7 molecules, and we don't know. You know, what is  
8 the epitope that's coming out and will it  
9 sensitize. So that was our issue. And,  
10 therefore, since sensitization can only occur when  
11 there's no stratum corneum, and we put in the  
12 restrictions not undamaged skin, not for inhaled  
13 products, and not for products that can contact  
14 the mucus membranes.

15                  DR. HILL: But the complication that I  
16 think remains sitting in my mind then is the  
17 potential for these smaller peptides to grow,  
18 again, I guess based on mostly disulfide. I'm not  
19 sure what other mechanisms would be involved that  
20 could do that --

21                  DR. BELSITO: I can't comment on it.

22                  DR. HILL: I know.



1 DR. BELSITO: If in formulation these  
2 can re- aggregate into longer amino acids, Dan,  
3 you may want to comment --

4 DR. HILL: So what assurances would we  
5 want to see in order to conclude, you know, that  
6 we have to assure that this won't happen, this is  
7 what causes it to happen. And I don't know if you  
8 have an expert in on immunology that they're still  
9 going to be able to address that particular issue  
10 unless they've really thought this through. This  
11 is new to me. I haven't encountered this before.

12 DR. BELSITO: An immunologist wouldn't  
13 be able to probably answer whether these can  
14 aggregate. Dan might be able to.

15 DR. LIEBLER: Yeah. I don't really  
16 think so. I mean, you know, my lab --

17 DR. HILL: That's what they're  
18 suggesting in here.

19 DR. LIEBLER: Yeah, I know. My lab does  
20 proteomics for a living pretty much. And, you  
21 know, we digest proteins, and in some cases we  
22 don't reduce and alkylate. We just digest without

1 reduction. And we never have an issue of, you  
2 know, forming of larger structures by  
3 re-oxidation. So, I mean, I think it's probably  
4 -- it would require a very highly oxidizing  
5 environment, and that's probably not applicable in  
6 this case. So I don't think that's the issue.

7 I think, you know, quality control in  
8 these hydrolysis chemistries, and preparation, and  
9 batch checking to make sure that you've actually  
10 got the high stuff down below some threshold. We  
11 don't know what it is, but it should be very low.  
12 And, you know, I think I think that's probably  
13 already being done in industry. The capacity  
14 exists to assess that.

15 The problem is with some of these  
16 experiments, we don't know what the  
17 characterization of the test material was. In  
18 this mouse, you know, study, for example, I just  
19 don't think it's well enough characterized to  
20 allow us to figure out what's going on and how  
21 applicable this result is to use of commercial  
22 products in humans.

1 DR. HILL: My gut reaction when I saw  
2 that large protein in there was, well, they've got  
3 bacterial growth in their raw materials such that  
4 it's kicking out, lypo- polysaccharides or  
5 something that's causing it, and that was the  
6 whole source of the problem. But just a  
7 conjecture.

8 DR. BERGFELD: Jim?

9 DR. MARKS: Yeah. I'd like to point out  
10 that it's not just to the soaps there's been  
11 reactions reported to. There was an eyelid cream  
12 and body moisturizer, two separate case reports,  
13 contact urticaria to that. So I think it's more  
14 than just -- and I don't know where the sources --  
15 the one reference actually didn't appear to be  
16 Japanese authors, but it looked like it was a  
17 secondary report.

18 DR. BERGFELD: Well, we have two motions  
19 that have not been seconded that have to the  
20 table. One is to "safe" with great restrictions,  
21 and the second is "insufficient." So I'd like to  
22 hear a final motion.

1 DR. MARKS: Table, not "insufficient."

2 DR. BERGFELD: Oh, excuse me. "Table,"  
3 thank you.

4 DR. MARKS: And, again, if I were going  
5 to err, I'd prefer to err on the safe side and  
6 have somebody who deals with this and understands  
7 type one reactions, possibly somebody who can  
8 relate back to natural rubber latex, contact  
9 urticarian anaphylaxis epidemic which occurred,  
10 and then when limits were placed on natural rubber  
11 latex gloves, we saw that disappear.

12 I just would feel more comfortable  
13 setting the limits, and perhaps not a whole bunch  
14 of restrictions if we understand perhaps a little  
15 bit more. We may not get any further, I agree,  
16 Don, but our team felt more comfortable.

17 DR. BERGFELD: Don? Well, a couple of  
18 things. First of all, I'm not sure that this is  
19 comparable to the natural rubber latex. I tried  
20 searching because, as you know, with natural  
21 rubber latex, it was a series of about six Hev  
22 proteins that were shown to be problematic. And,

1       therefore, by removing those Hev proteins from the  
2       latex sources, they essentially got rid of the  
3       epidemic.

4                   When I tried searching for, you know,  
5       key proteins in wheat because I thought of that  
6       approach, say, okay, eliminate these, I couldn't  
7       find them. Now, I didn't do an extensive and  
8       exhaustive search, and that is maybe something  
9       that can be done to see if you can identify the  
10      epitopes that are sensitizing for the vast  
11      majority of people. That's one way of getting  
12      around it.

13                   My only concern with tabling this to get  
14      an expert in is I'm not sure that they can tell us  
15      whether peptides of 30 or less will or will not be  
16      sensitizing. And, therefore, we're still going to  
17      be missing that critical data that we feel is  
18      necessary.

19                   So I would like to go forward with our  
20      motion, you know, and get an expert to talk to us.  
21      But, I mean, this is the first time we're looking  
22      for it, you know. We can table it later on if it

1 appears that we're going to need more time to  
2 address issues that we need. But I would just  
3 like to see this, you know, progressing because if  
4 you read labels and if we're that concerned about  
5 the safety of this, you see the number of uses out  
6 there.

7 So, you know, if you're telling me  
8 you're concerned, then I think we need to move  
9 ahead. And by tabling it, we're not moving ahead.  
10 We're just stalling it.

11 DR. BERGFELD: Response? No response?  
12 Is there a motion?

13 DR. HILL: Could you read that list of  
14 restrictions you're proposing again? I think I've  
15 got it.

16 DR. BELSITO: Okay, hold on. So we're  
17 saying that these hydrolyzed wheat proteins are  
18 safe when they are formulated to minimize peptides  
19 greater than or equal to 30 amino acids in length.  
20 But they should not be used on damaged skin, on  
21 products that could contact mucus membranes, and  
22 on products that could be incidentally inhaled.

1 DR. BERGFELD: Are you making that a  
2 motion?

3 DR. BELSITO: That was my motion  
4 originally.

5 DR. BERGFELD: Well, restating it.

6 DR. BELSITO: Yeah.

7 DR. BERGFELD: Is there a second?

8 DR. SHANK: When you say they can't be  
9 used on mucus membranes and inhalation, they being  
10 the 30 amino acid links and smaller?

11 DR. BELSITO: Well, we've already said  
12 that what's out there should be 30 amino acids and  
13 less. I mean, we're saying anything with  
14 significant content above 30 amino acids would be  
15 unsafe, or the safety is not known. We're saying  
16 that below, you know, 30 or below will not  
17 cross-link IgE, will not trigger the anaphylactic  
18 reaction, so we're not concerned about those  
19 lengths of hydrolyzed wheat proteins in  
20 individuals who are already sensitized.

21 But the question we don't have it, will  
22 they induce sensitization in people who are not

1 sensitized who could then be exposed to wheat in  
2 food or whatever and develop anaphylactic  
3 reactions as a result of sensitization to a  
4 cosmetic product?

5 DR. HILL: So your motion is that  
6 restriction and in addition to --

7 DR. BELSITO: In addition --

8 DR. HILL: -- damaged skin, mucus  
9 membranes, inhalation.

10 DR. BELSITO: Right.

11 DR. BERGFELD: Paul, did you want to  
12 speak?

13 DR. SNYDER: Well, I as just going to  
14 reiterate. I think, to me, the immunologic data  
15 is pretty strong that there's a cutoff for  
16 elicitation. It's clear that we've got good data,  
17 that less than 30 amino acids in length, you  
18 cannot -- even in people who are sensitized, you  
19 will not elicit a reaction, a type one reaction.

20 What we don't have, and we have good  
21 data saying that if you have damaged skin and  
22 you're exposed to greater than 30 amino acid



1 length hydrolyzed proteins, you will be  
2 sensitized. And so, that's the two solid pieces  
3 of data we have.

4           What we don't have is, where is the  
5 cutoff for sensitization? And so, we can't link  
6 the sensitization with the elicitation cutoff  
7 right now. If we got that data that we tell --  
8 advise to not have certain peptide links in the  
9 final product, then I'm quite comfortable we would  
10 be safe.

11           DR. BELSITO: I mean, we can move ahead,  
12 try and identify an expert who looks at protein  
13 sensitization and digests of proteins of albumin,  
14 whatever you want, and come in and say, oh, yeah.  
15 I mean, if you have a, you know, a peptide smaller  
16 than this, nothing is going to happen  
17 immunologically, that'll solve our problem, you  
18 know. But at least we're moving ahead.

19           And, you know, because, again, I think  
20 if you're that concerned about the possibility  
21 that, you know, there's over 1,000 products out  
22 there, then to stall it, I think is a mistake.

1 DR. BERGFELD: Jim?

2 DR. MARKS: Second.

3 DR. BERGFELD: Thank you. Anyone want  
4 to make a comment before I call the vote?

5 DR. LIEBLER: Yes.

6 DR. BERGFELD: I think the discussion is  
7 the main thing.

8 DR. LIEBLER: So one of the points that  
9 was raised last time was a lack of information  
10 about how these were prepared and characterized.  
11 You can make -- do enzymatic hydrolysis. You can  
12 do modified acid-based hydrolysis. And we didn't  
13 have much of anything. Now we have minimal  
14 information in table two.

15 This is an opportunity to get, if  
16 there's more information available from industry,  
17 on the methods used to characterize these and  
18 ensure that the components over 30 amino acids are  
19 on the top end of the weight range is minimized,  
20 that would be particularly valuable here in  
21 helping us formulate our conclusion.

22 And so, I'd like to emphasize that if

1       it's possible to squeeze harder for that  
2       information, we should try and do that.

3                 DR. BERGFELD:   Halyna, do you wish to  
4       comment at all?

5                 DR. BRESLAWEC:  We will certainly look  
6       for that information and provide it if we have it.

7                 DR. BERGFELD:  All right.  Thank you.  
8       I'm going to call the question then.  I see no one  
9       needing to speak.

10                All those in favor with regard to "safe"  
11       with all the restrictions as stated?

12                Unanimous.  A wonderful discussion.  
13       Thank you.  Moving onto the next ingredient then,  
14       the alkyl amides.  Dr. Marks?

15                DR. MARKS:  In June, the Panel issued an  
16       "insufficient data" announcement.  We wanted  
17       dermal irritation sensitization for lauroyl lysine  
18       and sodium lauroyl glutamate.  We received  
19       information on both of these.  We felt that  
20       lauroyl lysine could be safe.  And then the sodium  
21       lauroyl glutamate limit its use in leave-ons to --  
22       four percent, I'm sorry, and in rinse-offs to 40

1 percent.

2                   So we would move forward with these 115  
3 ingredients to issue a tentative report with,  
4 again, a "safe" conclusion, except for SLG, four  
5 percent for leave-ons and 40 percent for  
6 rinse-offs. That's a motion.

7                   DR. BERGFELD: Don't

8                   DR. BELSITO: That's their current use.

9                   DR. MARKS: Yes.

10                  DR. BELSITO: So why are you restricting  
11 it if we just say -- we didn't need to restrict  
12 that because that's the highest leave-on as four  
13 percent, and the highest rinse-off is 40 percent  
14 for the glutamate. So we just said --

15                  DR. MARKS: I'm sorry, I meant 2.5  
16 percent leave-on and 30 percent rinse-off, so it  
17 does limit it. That's the data we have. I'm  
18 sorry. I was reading the wrong line in my notes.

19                  DR. BELSITO: Well, we have data that  
20 the highest test concentration was five percent,  
21 and that was a mild irritant, but not a  
22 sensitizer. And so, we thought that we could go

1 with a "safe under the intended conditions of use  
2 when formulated to be non-irritating." We didn't  
3 see any issues with sensitization, and not putting  
4 any concentration limits on them.

5 DR. BERGFELD: Comment?

6 DR. MARKS: Where was the five percent,  
7 Don? I have wave two, the max was okay at 2.5  
8 percent. So I missed that five percent, I guess,  
9 with the SLG.

10 DR. BELSITO: Let me -- it was in wave  
11 two.

12 DR. MARKS: Okay.

13 DR. BELSITO: They were induced at five  
14 percent and challenged at 2.5 percent.

15 DR. MARKS: Okay.

16 DR. BELSITO: So the induction was five  
17 percent.

18 DR. MARKS: Okay. Fine.

19 DR. BERGFELD: So are you agreeing --

20 DR. MARKS: Yes, "safe."

21 DR. BERGFELD: -- to take a wave at the  
22 restriction?

1 DR. MARKS: Correct. Yes.

2 DR. BERGFELD: So your amended motion.

3 Are you going to second that?

4 DR. BELSITO: I will second that one.

5 DR. BERGFELD: Any other discussion?

6 Ron Hill?

7 DR. HILL: I will say that this is not a  
8 consensus opinion because I was troubled by the  
9 idea that we only have data on two amino acids  
10 effectively, particularly when you separate, which  
11 I do, in terms of read-across all the acetylated  
12 amino acids. And furthermore, we have the  
13 information that came to us this time that the  
14 lysine amino acid was not alpha acetylated, but  
15 rather epsilon amino acetylated.

16 So, and the only other data that we have  
17 for amino acids is the silk amino acids, and we  
18 only have an LLNA, and it's on a mixture because  
19 it is the silk amino acid. So I'm -- even though  
20 I doubt that there's any problem with all these  
21 other amino acids that we haven't looked at -- we  
22 have phenyl alamine. We still haven't addressed

1 the malonyl -- particular malonyl issue. And so,  
2 I'm uncomfortable with the read-across.

3 DR. BELSITO: Yes, I have that.

4 DR. BERGFELD: Okay.

5 DR. HILL: And so, that's where I stand.

6 DR. BERGFELD: Okay. Dan, can I have  
7 your --

8 DR. HILL: I'm perfectly comfortable  
9 with the data on the lysine and for all the  
10 glutamates because I think we have more than  
11 adequate data. But for all these other amino acid  
12 and acyl long-chain amides, I'm not comfortable at  
13 all. And the rest of my concerns have been  
14 captured in the transcript, so.

15 DR. BERGFELD: Dan?

16 DR. LIEBLER: I note Ron's concerns. I  
17 don't share them.

18 DR. BERGFELD: Okay. Don?

19 DR. BELSITO: Yes. There were several  
20 TEA- containing compounds in this group. So in  
21 the discussion, we need to point that out, talk  
22 about possible amine impurities and nitrosation,

1 so that usual boilerplate in the discussion.

2 DR. BERGFELD: Okay.

3 DR. HILL: And reference the TEA review  
4 because we had a TEA group of some sort that we  
5 looked at not long ago.

6 DR. BERGFELD: Any other comments? The  
7 motion has been made, and I believe seconded, to  
8 go forward. And we're not going to restrict the  
9 concentrations --

10 DR. MARKS: Correct.

11 DR. BERGFELD: -- as used.

12 DR. BELSITO: Just -- no, "formulated to  
13 be non- sensitizing."

14 DR. BERGFELD: "Formulated to be  
15 non-irritating."

16 DR. BELSITO: "Non-irritating."

17 DR. BERGFELD: "Non-irritating." That  
18 one is good.

19 All those in favor, please indicate by  
20 raising your hand.

21 Those abstaining?

22 DR. HILL: No, opposed.



1 DR. BERGFELD: Opposed? One opposed.  
2 Thank you. Moving then to the next ingredient,  
3 formic acid.

4 Dr. Belsito?

5 DR. BELSITO: Yeah. So in June, we  
6 decided to reopen this because had information  
7 that not only was formic acid used as a pH  
8 adjuster, but also as a preservative, and also to  
9 incorporate sodium formate into the report. And  
10 that has been done, and we're ready to go ahead  
11 with a conclusion that "safe as used when  
12 formulated to be non- irritating."

13 DR. MARKS: Second.

14 DR. BERGFELD: Second. Any discussion  
15 regarding this motion?

16 DR. BELSITO: Well, go ahead.

17 DR. MARKS: No, go ahead.

18 DR. BELSITO: Just one thing. In the  
19 use table, it said that the highest dermal contact  
20 was .02, and the highest leave-on was .2 in a  
21 non-coloring hair product. So that dermal contact  
22 needs to be corrected to .2 as well because it's

1 our understanding that a non-coloring hair product  
2 would also contact the scalp, which is skin. And  
3 then just some minor edits.

4 DR. MARKS: Fine.

5 DR. BERGFELD: Any other -- fine? No  
6 other discussion?

7 (No response.)

8 DR. BERGFELD: I'll call the question  
9 then. All those in favor of "safe,  
10 non-irritating?" Thank you. Unanimous. The next  
11 one is chamomile. Dr. Marks?

12 DR. MARKS: So this is the second time  
13 we've seen this report. However, now the German  
14 chamomile has been split out from the Roman  
15 chamomile nobilis. And so, this, the chamomilla  
16 recutita, the German chamomile, we felt we could  
17 move onto a tentative report with a "safe up to  
18 0.4 percent," based on an HRIPT in wave two that  
19 showed the 0.4 percent as "safe."

20 Its use concentration is up to 0.5  
21 percent flower extract and 0.61 percent in the  
22 extract. But we decided to limit it to the 0.4

1       percent. Even though there are small differences,  
2       it turns out to be 1,000 to 2,000 parts per  
3       million difference.

4                So again, move "safe up to 0.4 percent"  
5       in the chamomilla recutita.

6                DR. BERGFELD: And you're putting that  
7       in the conclusion, the restriction?

8                DR. MARKS: Yes.

9                DR. BERGFELD: Don't?

10               DR. BELSITO: Well, we had -- we thought  
11       that the flower ingredients were okay. We're a  
12       little concerned that we had no information really  
13       about the composition of the stem and the leaf.  
14       And there was some information that at least the  
15       composition of the root was significantly  
16       different from other parts of the plant.

17                So we thought that the components that  
18       were prepared from the chamomilla recutita flower  
19       were safe as used, and the others were, at this  
20       point, insufficient for composition of the plant  
21       and the leaf.

22                We also wanted clarification of exactly

1        what chamilosin was because it appeared in both  
2        reports, and in the anthemis report, it said that  
3        chamilosin was 10.5 percent anthemis nobilis. And  
4        if, in fact, it's anthemis nobilis, then the  
5        information on chamilosin, unless it also happens  
6        to contain chamomilla recutita, would need to be  
7        removed from this report.

8                    And the last issue is the data that we  
9        got on chamomile teas and extracts where it wasn't  
10       clear which chamomile was being used. It's my  
11       understanding that chamomile tea is from chamomile  
12       from chamomilla recutita, and that the homeopathic  
13       uses of chamomile when referred to as chamomile  
14       are also chamomilla recutita, but that's just my  
15       understanding. I don't think there's any clear  
16       definition unless we can get it from that PDR that  
17       was referenced in other botanical that would tell  
18       us. Chamilosin I actually think is chamomilla  
19       recutita and not anthemis nobilis, but that needs  
20       to be clarified.

21                    But having said all that, the flower  
22       ingredients we're okay with. The other components

1 of the plant were not, "insufficient for  
2 composition."

3 DR. MARKS: So, Don, you didn't feel the  
4 difference in concentrations between the HRIPT and  
5 what it's being used with would be -- raise any  
6 concern for sensitivity?

7 DR. BELSITO: Of the flower ingredients?

8 DR. MARKS: Yeah, the flower extract and  
9 the extract.

10 DR. BELSITO: No. I mean, we had an  
11 HRIPT a.4 percent.

12 DR. MARKS: Right.

13 DR. BELSITO: And I thought that was  
14 fine. But we don't know what's in the other  
15 ingredients.

16 DR. MARKS: But we have a use of 0.5  
17 percent. So you didn't think that difference  
18 between --

19 DR. BELSITO: I didn't think it was a  
20 huge difference. We did discuss -- some of my  
21 teammates were concerned about, you know, the  
22 number of case reports here. But it was pointed

1 out that those were special populations who are  
2 known to be allergic to compositae plants, that  
3 this is a member of the compositae. They share a  
4 lot of the same allergens. And so, you really  
5 weren't looking at any kind of data from the  
6 population in general, that these were very select  
7 populations, which raised the discussion as to  
8 whether, you know, just for people who aren't  
9 dermatologists and may not understand when they  
10 see data under the heading of "provocative  
11 testing," if we somehow can maybe asterisk it and  
12 say, you know, provocative testing is testing on  
13 people with skin disease who are thought to be  
14 allergic and are not representative of incidence  
15 rates in the general population. That may one way  
16 of handling it.

17 But, no, I thought, you know, the  
18 difference between .4 and .5 for these, particularly  
19 given the level of, you know, the turpenes of  
20 concern didn't bother me.

21 DR. MARKS: Okay. Composition? So you  
22 want an "insufficient data for composition of" --

1 DR. BELSITO: "Sufficient" for all the  
2 extracts of the flower, but "insufficient" for the  
3 whole plant and the leaf.

4 DR. BERGFELD: I see part of Marks' team  
5 wagging their heads.

6 DR. BELSITO: We have --

7 DR. BERGFELD: Is that agreeable?

8 DR. MARKS: Yeah.

9 DR. SHANK: Basically --

10 DR. MARKS: Yes. I'll second that  
11 motion, Don.

12 DR. BERGFELD: That was a motion?

13 DR. BELSITO: Yes.

14 DR. BERGFELD: Because we had another  
15 motion. All right, so we have a second motion.  
16 Halyna?

17 DR. BRESLAWEC: I would ask the Panel to  
18 discuss whether they believe that "formulating to  
19 be non- sensitizing" would be a conclusion that  
20 they would consider, especially since this is a  
21 similar. This is the same category, the  
22 compositae family, as the achillea, for which a

1 "formulated to be non-sensitizing" conclusion is  
2 reached.

3 DR. BELSITO: A very important point,  
4 and I would agree. Yes.

5 DR. BERGFELD: So you're applying that  
6 to what?

7 DR. BELSITO: Again, I think for all the  
8 botanicals in which we're looking at sensitizing  
9 components that are below the levels of concern,  
10 we should have obviously the botanical discussion,  
11 pointing out the specific components that could be  
12 of concern when stacked on other botanicals and  
13 reinforce that in the conclusion by saying, "when  
14 formulated to be non-sensitizing." Yes, I would  
15 agree.

16 DR. BERGFELD: So what you've actually  
17 said, you're going to expand your discussion to  
18 include that -- expand the discussion, but put  
19 into your conclusion, the statement should be  
20 "formulated to be non-sensitizing." Okay.

21 DR. BELSITO: Correct.

22 DR. BERGFELD: Okay. So we have a --



1 DR. SHANK: Can I just ask a question?  
2 When we say "when formulated to be  
3 non-sensitizing," what is that saying to the  
4 formulator? Do they have to test their formulas  
5 and demonstrate that it's non-sensitizing?  
6 Irritation is an easy test, but sensitization is  
7 much more involved. So what are we saying to the  
8 formulator specifically?

9 DR. BELSITO: I think what we're saying  
10 to them is we're also pointing out the specific,  
11 you know, ingredients components of the botanical  
12 products that would be of concern. And usually  
13 those are fragrance ingredients that are in the  
14 botanicals. So, for instance, something like the  
15 chamomilla recutita has linalool, which is a known  
16 fragrance sensitizer. It has linalool acetate.

17 So we would be going through, and there  
18 are usually, again, going to be terpenes,  
19 terpenoids, and listing those of concern. And so,  
20 what we're telling the manufacturer is if you're  
21 combining this with another botanical that also  
22 has high levels of linalool, then you need to go

1 back and you need to really then go to RIFM and  
2 look at the data that RIFM has set in terms of  
3 limits of use of these fragrance ingredients in  
4 fragranced products. Those limits exist for most  
5 of the things we're going to be concerned about.  
6 And then, you'd better not be stacking linalool  
7 above a level that would be restricted by IFRA.

8           So the International Fragrance Research  
9 Association sets limits on fragrance ingredients  
10 that are sensitizers. And the limits are actually  
11 set using a QRA approach. And as you've seen, as  
12 we will get to idyl propyl and butyl carbonate,  
13 where the Europeans have also put a lower limit on  
14 an underarm deodorant. Underarm deodorants  
15 typically have lower limits because they're  
16 braided skin. If you shave your underarms,  
17 they're occluded. They're more absorptive.

18           So what we're telling manufacturers is,  
19 these are the components of concern. If it's  
20 pulegone, we know it's toxic levels. You'd better  
21 keep your levels less than that. If it's a  
22 sensitizer, almost all of them are going to be

1 fragrance ingredients. They can go to IFRA and  
2 look at the IFRA dossiers and see where those  
3 cutoffs have been set. So that's what we're  
4 telling them.

5 DR. BERGFELD: Jim?

6 DR. MARKS: Don, I wanted you to clear  
7 up in the last meeting, not this one, you had  
8 asked for absorption. Was that still necessary?

9 DR. BELSITO: No, I didn't think it was  
10 necessary.

11 DR. MARKS: Okay, good.

12 MR. JOHNSON: I have a question to ask?

13 DR. BERGFELD: Okay, Wilbur?

14 MR. JOHNSON: Yes. Dr. Belsito, for the  
15 discussion, you want that expanded to specifically  
16 mention those components that are of concern  
17 relating to their sensitization potential.

18 DR. BELSITO: You know, it's unfortunate  
19 that we're doing botanicals before we've looked at  
20 how we're going to approach botanical  
21 boilerplates. But, yes, I think in general, when  
22 we are doing these botanical products, we have to

1 point out those components of a botanical that  
2 we're concerned about.

3           And, you know, in this case, there's  
4 farnesene, there's linalool, and linalool acetate,  
5 azulene. And just point out, you know, what we're  
6 concerned about with these individual chemicals,  
7 whether it's a toxic endpoint or carcinogenic  
8 endpoint, a sensitizer endpoint. And, you know,  
9 say, yo', in these specific products, we're not  
10 seeing an issue if they were used singly at the  
11 levels we're told they're used. But we're  
12 concerned that these components could be in  
13 another botanical that could be stacked into a  
14 product and could exceed these levels. So that's  
15 what we're going to say. And all of that will  
16 need to be I the discussion.

17           Now, not to skip ahead too much, but we  
18 sort of thought, well, you can do boilerplates for  
19 pesticides. You can do boilerplates for  
20 aflatoxin. You can do an introductory boilerplate  
21 for botanical in general, but it's very difficult  
22 to create a schema that is going to address all

1 the botanicals. So really, when you're creating a  
2 discussion, you've got some guidelines, but it's  
3 going to be case by case depending on the  
4 botanical.

5 Like the phytosterols, I don't think we  
6 need a botanical discussion. There's nothing  
7 really in them of concern. With others where you  
8 get things like pulegone, thujone, and, in  
9 particular, a lot of them you're going to get, you  
10 know, these "fragrance sensitizers," you know,  
11 we'll need to point those out, you know, just as  
12 examples of what the Panel is concerned about.

13 DR. MARKS: Okay.

14 DR. BERGFELD: Looking at any other  
15 discussion? Now, we have a motion that has been  
16 placed and it's been seconded. And would you  
17 restate that motion after all this discussion?

18 DR. BELSITO: Yes, that the flower --  
19 those components of the chamomilla recutita that  
20 are derived from the flower are safe as used when  
21 formulated to be non-sensitizing. Those  
22 components that are derived from other parts of

1 the plant are insufficient, and the insufficiency  
2 is composition of those parts.

3 DR. BERGFELD: Thank you. I'd like to  
4 call for the question then.

5 All those in favor of this conclusion?  
6 Thank you. Unanimous. We're moving onto the  
7 other half of this ingredient. Dr. Belsito, you  
8 started the discussion here, anthemis nobilis.

9 DR. BELSITO: Okay. Okay. So again, in  
10 this one, we need to clarify what chamilosin, and  
11 it's either anthemis nobilis or chamomilla  
12 recutita, and get it out of the inappropriate  
13 document and into the appropriate document.

14 And then having said that, we had  
15 extensive composition of the plant as a whole, as  
16 opposed to what we got with chamomilla recutita.  
17 And so, while we had lesser information about the  
18 flower, what we had was really the type of  
19 information we needed from the flower, which were  
20 the essential oils, and the potential fragrance  
21 ingredients, and sensitizers.

22 So for this particular group, the

1       anthemis nobilis, we thought we could go "safe as  
2       used when formulated to be non-sensitizing."  
3       Again, a discussion, the pesticide boilerplate,  
4       and, you know, identifying those components of  
5       concern.

6                   DR. BERGFELD:  Is there a second or a  
7       comment?

8                   DR. MARKS:  Yeah.  Let me make a comment  
9       because that's -- we had not considered that  
10       conclusion.  We felt we could say the linalool  
11       flower extracts are safe because we have the  
12       sensitization data to support that.  We didn't  
13       have the sensitization for water and powder, so we  
14       thought we would split that out and make it  
15       "insufficient."  But if you use the conclusion  
16       "non-sensitizing," I guess that covers it.

17                   So with that in mind, just as long as  
18       it's captured in this discussion, we'll second the  
19       motion.  Team?

20                   DR. SLAGA:  Yeah.

21                   MR. JOHNSON:  Can I ask a question?

22                   DR. BERGFELD:  Wilbur?

1                   MR. JOHNSON: Dr. Belsito, I guess with  
2                   respect to expansion of this discussion, do you  
3                   have any specific components that you would like  
4                   to be addressed in that discussion?

5                   DR. BELSITO: Hold on, Wilbur. Actually  
6                   for this one, there was nothing -- in terms of the  
7                   components, the angelate, the tryglate, there was  
8                   nothing that really jumped out. So, you know, I  
9                   don't think we need to really mention any  
10                  components. Just go with "formulated to be  
11                  non-sensitizing."

12                  MR. JOHNSON: Thank you.

13                  DR. BERGFELD: Any other discussion, or  
14                  needs, or edits? Ron Shank?

15                  DR. SHANK: I'd like to make one  
16                  comment. We're developing a clear pattern here  
17                  saying when "formulated to be non-sensitizing."  
18                  And what do we do about all the compounds that  
19                  have -- reviewed before and we've said they're  
20                  insufficient because we don't have sensitization  
21                  data? Do we go back to all of those and say we've  
22                  changed the conclusion to "safe if they're



1 formulated to be non- sensitizing?"

2 DR. BELSITO: No, because I think the  
3 difference here, the only other time we did that  
4 was with cocoamidyl propyl betaine or betaine  
5 because of the issue of the impurities and the  
6 difficulties of really fully assessing that. But  
7 really to date, we've been dealing with a pure  
8 compound, you know? I mean, you know, either it  
9 contains so much iodopropynyl butylcarbamate or  
10 doesn't. And you're not going to get iodopropynyl  
11 butylcarbamate being brought into the formulation  
12 by some other product.

13 Here, you know, particularly with  
14 botanicals, I mean, read a label on some of these  
15 shampoos. I mean, you just start, and there are  
16 10 in a row. And so, the concern with the  
17 botanicals are they're not a single pure  
18 ingredient, and you can stack component upon  
19 component upon component to get to a level in the  
20 finished product that is not safe.

21 So I think that's the twist here in the  
22 issue is that it's not a pure chemical that you

1 can easily restrict.

2 DR. SNYDER: I think it goes to the very  
3 fact of the stacking of the different components  
4 within a final product. So you can say "safe as  
5 used," but that's taking only that single  
6 botanical. But the three botanicals in sum total,  
7 they exceed the levels which will cause  
8 sensitization, which we clearly have negative data  
9 on. I think that's what we're trying to  
10 alleviate. We're trying to give them some  
11 guidance to make sure that they monitor the levels  
12 of known sensitizers in the final product.

13 DR. BERGFELD: Could I just ask a point  
14 of clarification. This word, "stacking," has been  
15 used a lot. The definition is? Is it scientific?

16 DR. SNYDER: I think it would be better  
17 to say the cumulative nature of the product  
18 formulation.

19 DR. BERGFELD: Okay, thank you.

20 DR. BELSITO: It's like bio handling.

21 (Laughter)

22 DR. HILL: If we're going to go there,

1       then I like "aggregate" better than cumulative,  
2       but that's just me.

3                     DR. BERGFELD:   Okay.

4                     DR. BELSITO:   "Aggregate" is good.  I  
5       like that.

6                     DR. BERGFELD:   Okay.  I'm going to call  
7       for the question.  All those in favor of the  
8       conclusion that's been proposed, please indicate  
9       by raising your hands.

10                    Thank you.  Unanimous.  Well, we're  
11       going onto the last bit, which are the re-reviews.  
12       And the first in this group is Dr. Marks and  
13       butylcarbamate.

14                    DR. MARKS:   So in 1996, the expert panel  
15       issued a safety assessment on iodopropynyl  
16       butylcarbamate with a conclusion it's "safe at  
17       concentrations less than 0.1 percent."  And it  
18       should not be used in products intended to be  
19       aerosolized.

20                    What really in the memo from Wilbur and  
21       looking at what now, the European Union has set a  
22       number of restrictions on, which in wave two it

1 indicated that these restrictions were based on  
2 iodine exposure. We had a robust discussion, and  
3 our team felt there was not a concern with iodine  
4 released. And so, our panel or our team moves  
5 that we do not open this report.

6 DR. BELSITO: Second.

7 DR. BERGFELD: Any further discussion?  
8 Obviously you'll need to elucidate or expand what  
9 you want to have appear in the final report.

10 DR. MARKS: Exactly. Yeah, it's going  
11 to really do with the iodine exposure and our lack  
12 of concern of exposure to that.

13 DR. BERGFELD: And you think you've said  
14 enough about that?

15 DR. MARKS: Yes.

16 DR. BERGFELD: Thank you. All right.  
17 Any other comments about not reopening the  
18 particular document?

19 None? Call the question. All those in  
20 favor? Thank you. Unanimous. Then, Lillian,  
21 you're up on the re-review summaries.

22 DR. GILL: This was the re-review

1 summary for polyvinylpyrrolidone and retinol and  
2 retinyl palmitate. This just captures the Panel's  
3 review of the new information and of the updated  
4 use data at the last meeting and their  
5 reaffirmation that these should not be reopened.

6 DR. BERGFELD: Any comments regarding  
7 either one of these particular summaries?

8 None? Well then, they're approved  
9 unanimously. Now, the next discussion, the new  
10 area, is the botanical boilerplate/guideline.

11 DR. BELSITO: Retinol?

12 DR. BERGFELD: No, together. Okay,  
13 unless you had a comment?

14 DR. BELSITO: We just had a minor  
15 editorial comment on the retinol/retinyl  
16 palmitate. Simply in the discussion that we  
17 struck that first sentence was retinol/retinyl  
18 palmitate. The panel recognized the high  
19 public/media visibility of concern raised by new  
20 studies. We got rid of that statement,  
21 "recognized the high public/media visibility of  
22 concern," and just said for retinol/retinyl

1 palmitate, the panel reviewed the  
2 photocarcinogenesis study and went on with the  
3 rest of the statement.

4 DR. BERGFELD: That's all right. We can  
5 go back to either one of these documents if you  
6 care to add it?

7 DR. BELSITO: No, that was it.

8 DR. BERGFELD: That was it?

9 DR. BELSITO: Yes.

10 DR. BERGFELD: All right. We'll move  
11 onto the boilerplate then. Dr. Belsito?

12 DR. BELSITO: Yes. So we got a lot of  
13 information on the boilerplates, and then we were  
14 handed comments from the Council yesterday at the  
15 beginning of the meeting. And we actually liked  
16 the Council's suggestions. We thought they were  
17 much more concise and to the point. So this is --  
18 I will call your attention to the handout that we  
19 got yesterday, that we liked the idea of handling  
20 in the abstract any point about plant used as a  
21 food or specific constituent that might be found  
22 in other plants. And that we'd say because

1 formulations may contain more than one botanical  
2 ingredient, caution was urged to avoid reaching  
3 the levels of toxicity for constituent. And  
4 industry should use GMP to limit impurities. And  
5 so, we liked that statement.

6 We liked the boilerplate for the heavy  
7 metal pesticides. And to quote, "The expert  
8 expressed concern about pesticide residues and  
9 heavy metals that may present in botanical  
10 ingredients." They stressed that the cosmetic  
11 industry should continue to use GMP to limit these  
12 impurities.

13 We also liked their suggestion for  
14 aflatoxin, where instead of saying the panel  
15 adopted the USDA designations, says the panel  
16 recognizes the USDA designations since I don't  
17 think it's in our purview to adopt their  
18 designation.

19 The issue came down to how to handle the  
20 discussion and make boilerplates. And what we  
21 ended up saying is that there can be some general  
22 guidance, but short of an opening paragraph

1 boilerplate where it's necessary, and the one that  
2 the Council we thought was good, which says, "As  
3 botanical ingredients derived from natural plant  
4 sources are complex mixtures, the Panel expressed  
5 concern that multiple botanical ingredients may  
6 each contribute to the final concentration of a  
7 single component. Therefore, when formulating  
8 products, manufacturers should avoid reaching  
9 levels of plant constituents that may cause  
10 sensitization or other adverse effects." And  
11 then, from there we would go on and identify any  
12 particular components of the plant we were  
13 concerned about.

14           But as to how you actually structure  
15 those paragraphs, there's no way that you can  
16 create a boiler point other than to say you attack  
17 each individual ingredient for its end point  
18 toxicologic concern. So if there are one or two  
19 that we're concerned about carcinogenicity, there  
20 would be a paragraph about that. If there are one  
21 or two that we're concerned about neurotoxicity,  
22 there'd be a paragraph about that. If there are



1 one or two that we're concerned about  
2 sensitization, there'd be a paragraph about that.

3 DR. BERGFELD: Would you suggest  
4 restructuring the guideline in any way?

5 DR. BELSITO: No.

6 DR. BERGFELD: Oh.

7 DR. BELSITO: I mean, I thought the  
8 Council's suggestions were very good. And, you  
9 know, basically their opening paragraph sort of  
10 gives guidance as to where we're going to go. You  
11 know, it says that we're concerned that we not  
12 reach levels that cause sensitization or other  
13 adverse effects, and these are the particular  
14 components that we're concerned about, and these  
15 are the end points that we're concerned about with  
16 these components.

17 DR. BERGFELD: Jim, any comment?

18 DR. MARKS: We concur.

19 DR. BERGFELD: Any comments by the Panel  
20 members regarding the boilerplate or the approach  
21 to the boilerplate.

22 DR. MARKS: Yeah. Probably the only

1 comment would be we, as Don used, once we got down  
2 to the specifics in the discussion, it's really a  
3 guidance document rather than --

4 DR. SLAGA: Than a boilerplate.

5 DR. MARKS: -- a boilerplate. But  
6 that's semantics.

7 DR. BERGFELD: Lillian, do you need any  
8 more from the Panel regarding the guidance  
9 document on botanicals?

10 DR. GILL: No. I think --

11 DR. BERGFELD: You think you have it,  
12 picked it up? Any comments from the Panel about  
13 any other proceedings or preparation? Don?

14 DR. BELSITO: Yeah. I would just like  
15 to mention something that Dr. Gill had mentioned  
16 yesterday so that it is in the actual meeting of  
17 today's meeting, and that is that hopefully the  
18 Panel will in march of 2014 begin to look at the  
19 issue of sensitization to methylisothiazolinone  
20 and begin to review that. It's a very hot button  
21 issue in Europe. I don't think that we can put  
22 together all of the information for the December

1 meeting, but hopefully we can begin to look at it  
2 at our March meeting.

3 DR. BERGFELD: Thank you. Halyna, any  
4 comment regarding the recommendation?

5 DR. BRESLAWEC: The industry is very  
6 actively working both in the United States and  
7 with our colleagues in Europe and Cosmetics Europe  
8 to develop additional data on that. And we're  
9 following the issue with real interest, and  
10 hopefully we'll have more information by the time  
11 the Panel meets on that. But it is, it's a very  
12 hot button issue, and we recognize that.

13 DR. BERGFELD: Thank you. I'd like to  
14 make some concluding remarks, if I might.

15 The panel members are in need of getting  
16 the compendiums, whether that be electronically or  
17 print. My preference for myself is both. I would  
18 also suggest that we take a look at the policies  
19 and the boilerplates that now exist that are being  
20 used by the writers just to take a look, to update  
21 ourselves.

22 DR. GILL: We do have a project for the

1       latter half of this year and next year taking a  
2       look at all of the boilerplates and making sure  
3       that the language is appropriation, that they're  
4       updated and they're dated following good practices  
5       to make sure that what we're citing is current.  
6       So we are -- we do have that project underway, and  
7       Monice has that on her desk.

8                   DR. BERGFELD: We also have on the  
9       website some white paper issues, so we do need to  
10      take a look at those as well. One that comes to  
11      mind is the hair dyes, but I know there are a  
12      couple of others. We probably should review that.  
13      Don?

14                   DR. BELSITO: Just one other point that  
15      I'd like to point out, and this is something that  
16      Halyna and I had a little opportunity to discuss  
17      in Belgium, and that is there used to be a  
18      publication Cosmetic Industry on Call, where you  
19      could easily identify an individual in a company  
20      if you as a physician were having problems with  
21      that or had a patient who seemed to be reacting to  
22      a specific cosmetic product. That has seemed to

1 go by the way side, and certainly the version I  
2 have is terribly outdated. I think that that is a  
3 very valuable piece of information and tool.

4           Apparently it was stopped because there  
5 wasn't really a lot of requests for it, but I  
6 think part of a lack of requests was the fact that  
7 dermatologists, in particular, were not aware that  
8 this document existed. And it's something that  
9 perhaps either the Council or the CIR, whosever  
10 purview that is, may consider trying to do that,  
11 you know. It's very easy in electronic format.  
12 And then, also, you know, broadcast the  
13 availability of that to individuals,  
14 dermatologists, other interested parties, who  
15 would like access to that information.

16           DR. BRESLAWEC: Yeah. The Council did  
17 Cosmetics on Call for quite a long time, worked  
18 together with the American Association -- Academy  
19 for Dermatology, distributed at some point paper  
20 directories of individuals to call within  
21 individual companies with issues. We switched  
22 that over to a computer-based system and

1 monitoring the use. The use was practically  
2 non-existent. And we had no complaints from  
3 anybody when the lists were not updated.

4 Our interpretation was that with Google  
5 availability and the companies putting their phone  
6 numbers on the back of cosmetics, that that  
7 eliminated the need for it, but we've heard from  
8 several sources that it would be a good thing to  
9 start up again, especially with direct access to  
10 individuals within companies from physicians that  
11 are having patient concerns. So we are  
12 considering revamping and reintroducing something  
13 along those lines again.

14 DR. BERGFELD: It seems to me before  
15 Alan left that he was engaged in a marketing  
16 project to market the CIR and the information that  
17 they have, as well as these types of resources. I  
18 wonder at some point we could get updated on where  
19 you are with that, because a lot that Don says is  
20 that the derms are just not knowledgeable that  
21 exist for them.

22 DR. BRESLAWEC: With regard to CIR

1 marketing, I think Lillian has got the --

2 DR. BERGFELD: Lillian has got that?

3 Yeah.

4 DR. GILL: Yes.

5 DR. BERGFELD: Another thing for your  
6 list, another item to --

7 DR. GILL: But I'm not sure that this  
8 particular project we're talking about is CIR's  
9 purview.

10 DR. BRESLAWEC: No, the Cosmetics on  
11 Call is a Council initiative, and it will be  
12 handled as such. But what I'm hearing is that the  
13 CIR Expert is interested in us doing that, and  
14 that message is received.

15 DR. BERGFELD: Thank you. Well, I think  
16 that we've come to the end of our meeting, and so  
17 we're going to adjourn and say we'll look forward  
18 to seeing everyone in early December, December 9th  
19 and 10th. And we'll be sure to send a message  
20 over to Curt as to when the meeting occurs.

21 So happy holidays. We're adjourned.

22 (Whereupon, at 10:18 a.m., the

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PROCEEDINGS were adjourned.)

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CERTIFICATE OF NOTARY PUBLIC

DISTRICT OF COLUMBIA

I, Carleton J. Anderson, III, notary public in and for the District of Columbia, do hereby certify that the forgoing PROCEEDING was duly recorded and thereafter reduced to print under my direction; that the witnesses were sworn to tell the truth under penalty of perjury; that said transcript is a true record of the testimony given by witnesses; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this proceeding was called; and, furthermore, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

(Signature and Seal on File)

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Notary Public, in and for the District of Columbia

My Commission Expires: March 31, 2017

