

<p style="text-align: center;">Page 1</p> <p>1 NATIONAL INSTITUTE OF 2 ENVIRONMENTAL HEALTH SCIENCES 3 4 NATIONAL CENTER FOR TOXICOGENOMICS 5 6 WORKING GROUP 7 8 9 NTP Public Meeting Report On 10 Carcinogens (RoC) Review Process 11 12 13 14 15 16 17 18 National Library of Medicine 19 Lister Hill Center Auditorium Building 20 Bethesda, Maryland 21 22 23 24 25</p>	<p style="text-align: center;">Page 3</p> <p>1 put forward and whether the process actually 2 addresses exactly what you'd like to see it 3 addressed. So today we're going to be 4 discussing some of the very modest technical 5 changes we've made in the preparation of 6 background documents for the Report on 7 Carcinogens and the review process itself. 8 Dr. Jameson is going to do a presentation 9 for that in a little while. Prior to Dr. 10 Jameson's presentation Dr. Goldstein will 11 remind us of a previous review we had on the 12 Report on Carcinogens process and some of 13 the recommendations that were made at that 14 previous review and his opinion about whether 15 we've addressed some of those recommendations 16 or not, and I look forward to that 17 presentation. I have a couple of 18 housekeeping comments for you this morning 19 that I'm required to tell you by the 20 National..., by the Hill Center. No food or 21 beverages are allowed in the auditorium, so 22 those of you who have coffee with you 23 quickly run out before the beverage police 24 show up. No smoking is allowed anywhere in 25 the building. That's true of the entire NIH</p>
<p style="text-align: center;">Page 2</p> <p>1 NATIONAL TOXICOLOGY PROGRAM 2 REPORT ON CARCINOGENS PUBLIC MEETING 3 January 27, 2004 4 DR. PORTIER: Good morning, 5 and welcome to the National Institutes of 6 Health. I am Chris Portier, I am the 7 Associate Director of the National Toxicology 8 Program and I want to welcome you here today 9 for the NTP public meeting on the Report on 10 Carcinogens, peer review process here at 11 Lister Hill Center Auditorium. It's my 12 great pleasure to have you here today to 13 discuss the process we are going to be 14 use..., using for the 12th Report on 15 Carcinogens, we are currently finishing up 16 the 11th and we're looking forward to 17 beginning our work on the 12th. It's always 18 good when you have a important document that 19 you're putting forth and a lot of public 20 interest and stakeholder concern about how 21 the process of that, that document is 22 prepared. It's always good at the beginning 23 to look at your process, think about it and 24 carefully assess whether it still meets the 25 needs for which the document was originally</p>	<p style="text-align: center;">Page 4</p> <p>1 Campus and all of the buildings in the NIH 2 Campus. There are conference microphones at 3 each seat, if you'd like to speak and you're 4 recognized by the chair then I hope that you 5 will press your button properly and a little 6 red light should show up at the top of the 7 microphone, Lynn, if you could press yours, 8 everybody can see what it looks like..., 9 there you go. When you're done speaking, 10 press the button again and it will go off. 11 If you don't press it we will hear all your 12 rude comments in the background. If you have 13 any presentation material, if you..., you, 14 you're planning on putting something up, I 15 would appreciate to make sure that you've 16 touched base with Dr. Wolfe, Dr. Wolfe, if 17 you'd stand right here, and she has copies 18 of that so that we can think about them and 19 look at them at a later date after your 20 presentation and if possible get them handed 21 out to everyone who is present. Finally, 22 there are public phones in this building 23 near the lobby, there are restrooms near the 24 lobby, all of that is right where you came 25 in.</p>

<p style="text-align: center;">Page 5</p> <p>1 This morning in, to help guide us  2 through this review and to interact with any  3 of the public commentators, we've assembled a  4 panel made up of some of our federal  5 partners, some members past and present of  6 the NTP's Board of Scientific Counselors.  7 They're here to enter into the dialogue with  8 you, to discuss some of the issues you're,  9 you're bringing forth and to provide us with  10 the Report at the end of the meeting as to  11 what they saw and what they might think we  12 should do with some of the information that  13 was presented to us. Chairing the meeting  14 for us this morning is Dr. Lynn Goldman,  15 Lynn used to be a member of the NTP Board  16 of Scientific Counselors, she has done a  17 number of interesting jobs over the year,  18 over the years, most notably Assistant  19 Administrator of EPA for Pesticides and Toxic  20 substances, was that it, assistant  21 administrator?  22 DR. GOLDMAN: The official  23 title is Assistant Administrator for Toxic  24 Substances.  25 DR. PORTIER: Assistant</p>	<p style="text-align: center;">Page 7</p> <p>1 Public Health at the University of Alabama  2 in Birmingham. Elizabeth is also a member of  3 the NTP Board of Scientific Counselors. She  4 sits on the Report on Carcinogens  5 subcommittee as does Dr. Carpenter, both of  6 them are here to address some of your  7 concerns and give us some advice, and again  8 we're very happy to have Dr. Delzell here,  9 here as well. Finally, we have Dr. Rafael  10 Moure-Eraso, who is a former member of the  11 NTP Board of Scientific Counselors, he sat  12 on the Report on Carcinogens subcommittee as  13 well. He's currently the professor and  14 chairman of the Department of Work  15 Environment at the University of  16 Massachusetts in Lowell, Massachusetts.  17 Rafael in recent months has been one of the  18 few board members who has criticized us in  19 public about the Report on Carcinogens  20 process, looking at some of our criteria and  21 some of the questions he has about how to  22 use that criteria and we look forward to his  23 discussion and comment as well. Sitting  24 next to Dr. Moure-Eraso, I'm going to go  25 back to my list so I get it correct here</p>
<p style="text-align: center;">Page 6</p> <p>1 Administrator for Toxic Substances. Now Lynn  2 is at the Johns Hopkins Bloomberg School of  3 Public Health in Baltimore, Maryland and  4 she'll be chairing and we're quite happy to  5 have her chairing the meeting this morning.  6 She's done a number of interesting pieces  7 of, interesting articles on the evaluation of  8 evidence for a variety of toxic endpoints,  9 looking at strength of that evidence and how  10 you use that to make decisions about public  11 health risks, and I think we're quite  12 pleased and privileged to have her here with  13 us today. Aiding Lynn in the, on the panel  14 today will be, I'm going to go back and go  15 through my list in order, Hillary Carpenter,  16 from the Minnesota Department of Health.  17 Hillary is a current member of the NTP Board  18 of Scientific Counselors and again he...,  19 we're very happy to have Hillary here today  20 as well. He brings to us a very pragmatic  21 State Public Health Official point of view  22 in looking at this type of information and  23 trying to make public health decisions on  24 it. Elizabeth Delzell is here from the  25 Department of Epidemiology, the School of</p>	<p style="text-align: center;">Page 8</p> <p>1 from the CDC NIOSH in Cincinnati, Ohio. Mark  2 is the official NTP li... liaison from the  3 NI...from NIOSH, the National Institute of  4 Occupational Safety and Health. He's followed  5 the NTP through a number of years, I believe  6 he sits on the RG2 subcommittee which is the  7 subcommittee of the NTP's executive committee  8 that is part of the ROC process. Joining  9 Mark eventually will be Bill Allaben from  10 the FDA's National Center for Toxicological  11 Research in Jefferson, Arkansas. Bill also  12 has been, is the official NTP representative  13 from the Food and Drug Administration and I  14 believe he also sits on RG2 and has looked  15 at the, the Report on Carcinogens process  16 and voted on it through the years.  17 I'd like to thank a number of people  18 for putting forth the effort to make this  19 public meeting possible and through years of  20 effort making the Report on Carcinogens  21 possible. Bill Jameson and his staff at the  22 NTP have very expertly handled, not only  23 this meeting, but the entire Report on  24 Carcinogens process for a number of years.  25 Bill, where are you? There he is. And if you</p>

<p style="text-align: center;">Page 9</p> <p>1 have any questions or comments afterwards,                  2 Bill will be available for discussion and                  3 listening to some of your points. Mary Wolfe                  4 and her staff in the NTP Office of                  5 Scientific... of... NTP liaison office and                  6 scientific review office also helped to put                  7 this public meeting together. If there are                  8 any reporters in the room who would like to                  9 have followup questions, I simply ask that                  10 you make sure that you touch base with Dr.                  11 Wolfe or a member of her staff before                  12 meeting with our staff so that we can keep                  13 track of who has met with whom and what                  14 discussions went on. Again, also if you have                  15 any documents or written comments that you'd                  16 like to give the program, please make sure                  17 Dr. Wolfe or a member of her staff gets                  18 them. Finally I'd like to thank one mem...                  19 one member of the audience who's come quite                  20 a distance, Dr. Ki-Hwa Yang from the Korean                  21 National Toxicology Program is here, they are                  22 trying to develop their own program in Korea                  23 and he's very interested in our public                  24 process of debate and discussion of NTP                  25 processes and documents. He's here not only</p>	<p style="text-align: center;">Page 11</p> <p>1 snowstorm, but, you know, snow like this can                  2 bring the Washington area absolutely to a                  3 halt and I hope that you had good travel and                  4 that, that you've been able to, to get                  5 around here. A couple of things, points                  6 that I want to make before going into our                  7 agenda, Dr. Portier already mentioned the                  8 importance of speaking into the mic, turning                  9 on your mic's. That's because this meeting                  10 is being recorded, both the presentations                  11 and, and the discussions and comments around                  12 it and, and so then also if you do enter                  13 into the discussion to give your name and so                  14 that, that would help the people who are                  15 transcribing or at least even listening to                  16 the, listening to the tape for preparing the                  17 minutes. Also that, since we are a small                  18 audience and this is a rather large room,                  19 those of you who are seated out in the, in                  20 the remote areas of this auditorium, you're                  21 more than welcome to move forward. You                  22 might have an easier time seeing the slides,                  23 hearing the presentations, hearing the                  24 discussion and um... honestly nobody up here                  25 is going to bite your head off or anything</p>
<p style="text-align: center;">Page 10</p> <p>1 for this meeting, but on Thursday, we are                  2 having another public meeting to look at the                  3 future direction of the National Toxicology                  4 Program and evaluate.... and begin the, a                  5 year long, year long process of developing                  6 a road map to achieve a different vision and                  7 a different direction, or an improved                  8 direction for the NTP. I'd like to invite                  9 all of you to that public meeting as well                  10 and I'm sure we have an announcement                  11 somewhere that we can give you of, on the                  12 logistics for that meeting. With that I want                  13 to thank you all for be here... being here                  14 and I'll turn it over now to Dr. Goldman who                  15 will chair this meeting from this point                  16 onward.                  17 DR. GOLDMAN: Good morning,                  18 and welcome, I'm going to do something I've                  19 always wanted to do and call this meeting to                  20 order. It's really a pleasure to have the                  21 opportunity to chair this meeting today, I                  22 know that many of you have come here from                  23 long distances and braving our little                  24 snowstorm here, which probably from, for                  25 other locales doesn't look like much of a</p>	<p style="text-align: center;">Page 12</p> <p>1 like that. This process is a very, very                  2 important process, it's a part of the Report                  3 on Carcinogens. I had an opportunity in                  4 participating in one back when I was a                  5 member of the Board of Scientific Counselors                  6 in the last go round of this and I can tell                  7 you that the comments that are made and the                  8 discussions here really make a difference in                  9 terms of improving the process for the                  10 Report on Carcinogens and, and in fact the                  11 Report of Carcinogens has very rapidly been                  12 evolving in its procedures over the last                  13 decade. I understand that most of that                  14 evolution has had to do with the very rapid                  15 change in the kind of scientific evidence                  16 that's available to the, to the reviewers,                  17 and that that has created changes that have                  18 allowed the incorporation and the                  19 consideration of, of newer scientific                  20 evidence. And at the same time I think that                  21 nobody involved in the process from, from                  22 what I can tell believes that, you know,                  23 that they have a perfect process that will                  24 never change, there's a real willingness to                  25 listen, there's real willingness to change</p>

<p style="text-align: center;">Page 13</p> <p>1 and so I just.... I think that that's an  2 important thing for everybody to understand  3 in terms of a tone for the day. Also that  4 there aren't very many of you here, we are  5 hoping that unlike some of these meetings  6 that we'll be able to have a little bit of  7 exchange back and forth, that it won't just  8 be a matter of, you know, one way street  9 communications, listening, but that if there  10 are things that members from the Board of  11 Scientific Counselors or others of you wanted  12 to elaborate on, draw out, have some further  13 discussion on from the presentations that  14 we're here and ready to do that. Since  15 there are not very many people here, I'd  16 like to start by very briefly going around  17 the room, Dr. Portier introduced the people  18 in the front of the room, but it's just, if  19 you could quickly go around and give us your  20 name, who you're with, that might be a nice  21 way to start the day given that there are so  22 few of us. So why don't we go ahead and get  23 started and, actually we'll start in the  24 very back and work our way forward, the  25 folks who were finding their way through the</p>	<p style="text-align: center;">Page 15</p> <p>1 MS. LUDMER: I'm Jenny  2 Ludmer, I'm here from Aspen Systems  3 Corporation.  4 MS. BECK: Nancy Beck from  5 the Office of Management and Budget.  6 DR. WOLFE: Mary Wolfe from  7 the National Toxicology Program, National  8 Institute of Environmental Health Sciences.  9 MR. NIDEL: Chris Nidel from  10 Baron and Budd.  11 MR. YANG : My name is Ki-Hwa  12 Yang from South Korea, I am working for the  13 National Institute of Toxicological Research  14 and I'm the head of the National  15 Toxicological Program in Korea.  16 MR. KELLY: I'm Bill Kelly  17 with the Center for Regulatory Effectiveness.  18 MS. LE HURAY: Thank you,  19 I'm Ann Le Huray from the American Chemistry  20 Council and I'm sad to report that Rick  21 Becker is stuck in his neighborhood and  22 won't be able to be here and he was going  23 to present the ACC's comments and I don't  24 have his slides, so we can figure out what  25 to do there.</p>
<p style="text-align: center;">Page 14</p> <p>1 building with me this morning...  2 COURT REPORTER: You spe...  3 referring to us?  4 DR. GOLDMAN: That's you...  5 you are...Yes, sir, are there any rows  6 behind you?  7 COURT REPORTER: No, ma'am,  8 there are not. My name is Todd Strader and  9 this is Sean Burns and we are the court  10 reporters who are preparing the transcript of  11 your meeting today.  12 MR. SCOTT: I'm Dean Scott,  13 I'm a reporter with BNA's daily environment  14 report.  15 MS. SHOEMAN: Loretta  16 Shoeman, OSHA, and I'll be moving up soon.  17 MR. SMITH: Darrell Smith,  18 Vice President of Government Environmental  19 Affairs for the Industrial Minerals  20 Association.  21 MR. KELSE: John Kelse ,  22 Industrial hygienist, RT Vanderbilt Company.  23 DR. ROTH: Adam Roth  24 representing Brush Wellman, a producer of  25 beryllium and beryllium compounds.</p>	<p style="text-align: center;">Page 16</p> <p>1 DR. PICCIRILLO : Vince  2 Piccirillo representing the Naphthalene Panel  3 of the American Chemistry Council.  4 MR. BABBAGE : Michael Babbage  5 from the Consumer Products Safety Commission.  6 DR. GOLDSTEIN: Bernie  7 Goldstein, Graduate School of Public Health,  8 University of Pittsburgh.  9 DR. PORTIER: Chris Portier,  10 NIEHS/NTP  11 MS. THAYER: Kris Thayer  12 NTP/NIEHS.  13 MS. FELTER: Susan Felter,  14 Procter &amp; Gamble.  15 MS. FISHER: Joan Fisher,  16 Procter &amp; Gamble.  17 DR. JAMESON: Bill Jameson,  18 NIEHS/NTP.  19 DR. BUCHER: John Bucher,  20 NIEHS/NTP.  21 DR. GOLDMAN: And there's one  22 last person, if you push the button on your  23 mic and we're just introducing ourselves.  24 MS. HURT: Valerie Hurt,  25 Office of General Counsel.</p>

<p style="text-align: center;">Page 17</p> <p>1 DR. GOLDMAN: Okay, well,  2 without further ado then, let's get started  3 and we're going to begin, as I said before,  4 this is a... part of a continuum of these  5 kinds of processes and we're fortunate that  6 today Dr. Bernard Goldstein from Rutgers  7 University is able to come... not Rutgers  8 anymore, this is wrong on the agenda,  9 University of Pittsburgh, School of Public  10 Health is going to be able to review the  11 last of these meetings and, and what  12 transpired there.</p> <p>13 DR. GOLDSTEIN: I don't want  14 to say the last meeting was contentious, but  15 I had to leave to go to a different  16 university afterwards. The, I hope you all  17 can hear me, and this is okay for the  18 recorder. The, the last meeting was an  19 example I think of openness and of a, just a  20 fair exchange of views. Lynn Goldman  21 started it off very well by saying two  22 things: one is that the process... any  23 process can be improved and certainly a  24 process as complex as the one of reporting  25 on carcinogens can be improved, and secondly</p>	<p style="text-align: center;">Page 19</p> <p>1 is one that I think has to be considered to  2 be a setting for all the activities of the  3 National Toxicology Program. I purposely  4 picked the IARC one to make it clear that  5 we're not talking just about NTP, we're  6 talking about anything that uses weight of  7 evidence where you have a continuum of the  8 evidence and there is a continuum. We start  9 at the bottom with compounds which we're  10 reasonably certain do not cause cancer, your  11 stuff goes to the top with compounds which  12 we know and all agree upon cause cancer and  13 then the amount of the evidence for every  14 one of the others falls somewhere in a  15 continuum, and what, in essence the  16 regulatory process has to do is draw a line  17 through that continuum, NTP has to draw a  18 line through the continuum. Whenever you  19 draw that line there are going to be  20 chemicals that are just above or just below.  21 So whatever the default assumptions are,  22 there are going to be chemicals for which  23 the evidence is sufficiently controversial,  24 and controversial's too strong a term, for  25 which the evidence reasonable scientists will</p>
<p style="text-align: center;">Page 18</p> <p>1 that the NTP clearly felt that it had to  2 respond to stakeholders, had to work with  3 stakeholders in order to do its job and I  4 think that's, that's a good way of setting a  5 process up. A couple of things came out that  6 were pretty clear, but sometimes were fuzzy,  7 and I don't know if there's a better way  8 of...turn some of the lights off, I'm not  9 sure how well this can be seen .... anybody  10 see a plug anywhere?</p> <p>11 There's a control panel, is it there?</p> <p>12 SPEAKER: Oh, God, now we're  13 completely in the dark.</p> <p>14 DR. GOLDSTEIN: But there,  15 there were three sort of central issues  16 which I think everybody agreed to, but they,  17 they weren't always very clear in, in what  18 people were saying. First, it's, it's very  19 clear that, that some but not all chemicals  20 cause cancer. If all chemicals caused  21 cancer there wouldn't be a need to single  22 out those, but that's, that's really sort of  23 inherent in this. The second point is a  24 point that has to do with the weight of  25 evidence and that weight of evidence issue</p>	<p style="text-align: center;">Page 20</p> <p>1 differ slightly as to how they interpret the  2 evidence, and inevitably there are going to  3 be compounds like that. We are never going  4 to be able to put all the compounds in boxes  5 because we're dealing with the continuum and  6 these lines are, if you will, artificial.  7 So keeping that line and keeping wherever we  8 hid that, wherever we put that line,  9 reasonably consistently is a very important  10 part of what the National Toxicology Program  11 does for us. Now we have to understand that  12 reasonable scientists will differ and there  13 will always be controversy and there will  14 always be, particularly with compounds like  15 carcinogens, sufficient economic interest,  16 sufficient political interest, sufficient  17 public interest that there will be people  18 who will be in making the big point about  19 the fact that you, if you only interpreted  20 this a little differently, it would be, now  21 be above the line instead of below the line.  22 There will never be a situation that I can  23 imagine in which every compound will have  24 complete agreement by every member of any  25 scientific peer group such as the Board of</p>

<p style="text-align: center;">Page 21</p> <p>1 Scientific Counselors, and that's built into  2 the system. The third point having to do  3 that, that's central that sometimes I don't  4 think is arguable but we sometimes lose  5 sight of it, everybody seems to say, and  6 that it's clear that we're talking primarily  7 about, about science, obviously there's more  8 than science in where you draw those lines,  9 but once you've drawn the lines, the  10 identification process is a scientific one.  11 Well, the key points that were  12 made, and I just pulled a few of them out  13 of the long series of presentations, is that  14 really everybody's in favor of compiling and  15 publishing a list of carcinogens, nobody came  16 in and said you shouldn't do it. You just  17 have to understand that, that by and large  18 the comments were appropriately focused on  19 process. Now, some were not, some basically  20 came in and said if only we had interpreted  21 this chemical this way it would have been  22 different. But by and large people were  23 focused on how do we change the process,  24 which is really what NTP is asking about.  25 What's their process like, not what's a</p>	<p style="text-align: center;">Page 23</p> <p>1 assumptions, what do you accept, what don't  2 you accept, in essence where do you draw  3 those lines, that had to do, in the case of  4 NTP between known and/or reasonably  5 anticipated. There was obviously a lot of  6 concern about, from the industry about the  7 public would overreact, there would be  8 unnecessary costs. There were some industry  9 representatives who basically said that  10 unless there was a unanimous vote, nothing  11 should be called a carcinogen, be called a  12 known carcinogen or even a reasonably  13 anticipated to be, because it had such a  14 tremendous impact on cost. There were others  15 who said that really this is a regulatory  16 decision because it has impact on OSHA's  17 right to, on, on OSHA's right to, OSHA's  18 worker language... basically you  19 automatically stick a compound into a  20 different card, category so OSHA regulates,  21 EPA has a right to know, you automatically  22 put it into a different right to know  23 category, so there are regulatory impacts and  24 because of these regulatory impacts there  25 ought to be a much more of a regulatory</p>
<p style="text-align: center;">Page 22</p> <p>1 specific chemical that should have been done  2 differently. I imagine some people here  3 talked about that, but again I think you  4 make your point much better if you say that  5 this is an example of where the process  6 could be changed rather than you should have  7 interpreted my chemical differently. So by  8 and large that was adhered to, and there  9 were no recommendations in this very long  10 document and major presentations to basically  11 say that NIEHS should run this or that the  12 NTP organizational structure should be  13 different. There were a number of people  14 from environmental groups which made comments  15 that basically said we object turning over  16 this process to the National Academy of  17 Sciences or EPA or FDA, but nowhere in the  18 record that I saw or in any of the  19 presentations was anyone who suggested that  20 we ought to do so. So there was sort of a,  21 perhaps a feeling among the environmental  22 groups that maybe the suggestion was out  23 there, but the suggestion was not really  24 made at the time of the meeting. There were  25 obviously a lot of arguments about default</p>	<p style="text-align: center;">Page 24</p> <p>1 approach to the document. Any comments that  2 come in should be responded to by the A, by  3 the NTP in writing rather than just simply  4 taking note of.... all back and forth  5 approaches are to occur as if this was a  6 regulatory document. Not everybody... in fact  7 it was probably a minority of people who  8 were in favor of that, but generally that  9 was an approach taken by a number of the  10 industry representatives. Again, not all,  11 that this ought to be much more of a  12 document that has the give and take that we  13 associate with an EPA regulatory document,  14 where the process is everything. Lynn Goldman  15 made a very good point about the, the fact  16 that, that in regulatory agencies sometimes  17 process is more important than substance, but  18 then when we look at carcinogens, we really  19 want to focus on substance, not process, and  20 Lynn, I think I'm quoting you correctly, I  21 think, in, in that. The public interest  22 groups wanted the burden of proof to be on  23 disproving carcinogenesis. The idea was  24 that, that, that the cancer causing chemical  25 is something that is such a tremendous</p>

<p style="text-align: center;">Page 25</p> <p>1 burden to the public that in fact there                  2 ought to be a burden of proof, the default                  3 assumptions ought to be changed and such                  4 that we lean over backwards to say, yes,                  5 something is a carcinogen until proven                  6 otherwise, and there have been a number of                  7 comments about the NTP process since then in                  8 the form of the, of the precautionary                  9 principle. Now there are a lot of process                  10 issues, and what's...</p> <p>11 SPEAKER: I'm sorry, I stepped                  12 on the...</p> <p>13 DR. GOLDSTEIN: ...the                  14 concerns about the process had to do with                  15 everything from there being not enough time                  16 for full presentations to the Board of                  17 Scientific Counselors to not enough compound                  18 specific knowledge, to lack of acknowledgment                  19 of submissions to lack of specific response                  20 to submissions, to better publicity and, and                  21 better organization. There's a whole series                  22 of different issues to which I would suggest                  23 that NTP has at least partially responded to                  24 just about all of them. There is an                  25 increased time for presentation to the Board</p>	<p style="text-align: center;">Page 27</p> <p>1 Scientific Counselors voted on the document,                  2 while the members of the Board of Scientific                  3 Counsel were there said, no, we don't vote                  4 on a document, the document is just one                  5 piece of the information, we might disagree                  6 in fact with part of that document, we're                  7 voting on this, you know, on this reasonably                  8 anticipated is it, doesn't, which category                  9 does it fit in and so that document should                  10 not be considered to be a document in which                  11 we unanimously approve. We're not approving a                  12 document, we're voting for a category and                  13 that distinction is a very important                  14 distinction and needs to be better publicized                  15 among others because otherwise the feeling is                  16 that they've approved the document, they've                  17 approved everything in the document when in                  18 fact that's not the way the process works.                  19 So these are a number of the, of the issues                  20 and what I would consider to be key, key                  21 points but which perhaps the most important                  22 ones that don't really fit under the process                  23 so much but fit under communication are                  24 these. There's a real concern about public                  25 misunderstanding. One of the more moving</p>
<p style="text-align: center;">Page 26</p> <p>1 of Scientific Counselors, the compound                  2 specific expertise that NTP has in a sense                  3 consulted with in developing the documents is                  4 now, is now sitting at the table, the                  5 submissions are at least being acknowledged                  6 and, but there is still not this specific                  7 response to the submissions, there is still                  8 not a , if you will a, we've seen this,                  9 we've read it, here's what we've done about                  10 it, here's where we think you're wrong,                  11 here's where we think you're right, that                  12 would transform this into a regulatory                  13 process, and that remains as it was before.                  14 My feeling is, you know, my bias is to say                  15 that that's appropriate. The better                  16 publicized and more accessible to the public,                  17 NTP has responded by having meeting, this                  18 meeting in Washington during an ice storm to                  19 make sure everybody gets to it, thank you                  20 very much, but there is clearly an approach                  21 to, to make this more publicized. And some                  22 of the publicity issues have to do with a                  23 better understanding of the process. There                  24 was a real feeling at the last meeting by a                  25 number of the attendees that the Board of</p>	<p style="text-align: center;">Page 28</p> <p>1 presentations was by Susan Dickinson from the                  2 Why Me organization, which is an organization                  3 of women who are concerned about breast                  4 cancer who basically said that Tamoxifen,                  5 when declared carcinogen by NTP, or                  6 considered to be in, in that process, that                  7 women who would have benefitted from                  8 Tamoxifen stopped taking the Tamoxifen. There                  9 was a physician here to testify from the                  10 drug company folks who were making it,                  11 basically testified that his estimate was                  12 that 50,000 women who would have benefitted,                  13 of the 50,000, I think he said 30 to 50,000                  14 stopped taking it, I don't know if those                  15 numbers are right, but clearly we are                  16 dealing with a situation in which there's at                  17 least a potential for, for public health                  18 benefit, and there's all these dose and dose                  19 rate issues. One of the speakers brought                  20 some sand, a man representing the solar                  21 industry, brought some beach sand, he said                  22 clearly you don't mean that, well, clearly                  23 people don't mean that. Those dose and dose                  24 rate issues are issues that perhaps don't                  25 get communicated very well, but still silica</p>

<p style="text-align: center;">Page 29</p> <p>1 is a carcinogen under the wrong  2 circumstances, if you will, so that that  3 issue of communication's important. The  4 chemical form. Again, silica is a part of  5 that, nickel was brought up, there are other  6 chemicals, chromium, which is an essential  7 nutrient in one valence and a carcinogen in  8 another, is another issue that needs to be  9 talked about, and the issue of a known human  10 carcinogen, if we're serious about  11 mechanistic information allowing one to say  12 that this is a known human carcinogen, even  13 though the epidemiological data isn't quite  14 clear cut, you've got a problem with the  15 word known. I think we in science understand  16 what we mean to say when we say it's a  17 known human carcinogen and we're bringing it  18 from reasonably anticipated to known because  19 of this mechanistic data, but again,  20 public..., being able to clearly communicate  21 that is, is difficult.  22 Now I've got some recommendations  23 that I've been told appropriately I should  24 make as a member of the public, so I'm going  25 to hold off making some of the</p>	<p style="text-align: center;">Page 31</p> <p>1 present, would you like to present that  2 after Dr. Jameson gives his review, we'd  3 appreciate that and then second, just take a  4 moment here if people have any questions  5 about that present... about what you just  6 saw and heard. Okay, thank you. Or comments,  7 sure.  8 DR. MOURE-ERASO: Thank you,  9 Dr. Goldstein, for a very interesting  10 presentation. I really appreciate your  11 perspective and I have two comments that,  12 that, that I would like to, to, to present.  13 The first one is I would like to reinforce  14 your, your view that I don't think there is  15 a substitution to the NTP as the agency that  16 should be conducting this process. I  17 believe that any other approach, especially  18 ad hoc approaches would, the National Academy  19 of Sciences or, or, or, or similar agencies  20 would be that, a ad hoc situation, what we  21 have with the NTP is a long history and a  22 long institutional memory of how to do this  23 and how to.... under the different problems  24 that we are facing and, and is the agency  25 that I believe is the most adequate agency</p>
<p style="text-align: center;">Page 30</p> <p>1 recommendations that I actually made in the  2 previous document that I'm going to stand  3 on, but let me just say that I generally  4 have been very, very positively impressed by  5 how NTP has responded in thinking through  6 the issues that people brought to them and  7 in making changes. Now, they have not made a  8 change which I would view should we put them  9 into the process of being a regulatory  10 agency and I think that they're absolutely  11 right about that. But that is an issue that  12 I'm sure will continue to be brought up and  13 will continue to be reviewed by NTP as to  14 how much they need to be responsive on a  15 blow by blow basis, much like a regulatory  16 agency, that being the central part of, of  17 where the, where I see a difference of  18 opinion among the, the people who we saw the  19 last time. So good luck on this  20 presentation, and I hope it works out as  21 well this time as it did last time.  22 DR. GOLDMAN: Dr. Goldstein,  23 before you sit down, first I, I assume that  24 you have an early flight today so if, if you  25 have new material that you'd like to</p>	<p style="text-align: center;">Page 32</p> <p>1 to, to conduct this process and I want to  2 make it clear that it's something that we  3 should cherish and maintain and, and I don't  4 think that, that the, the comments and  5 criticisms that sometimes people present in  6 the process as mine, for example, are not  7 meant to undermine or attack the mission of  8 the agency that I consider that is  9 irreplaceable and, and, and that has done an  10 excellent job. The other comment that I  11 have is that you, you mentioned your, your  12 concerns out of the 99 last session like  13 this on the fact that some... the, the  14 public health value of some substances that  15 because they are listed in some form as a  16 carcinogen are going to remove that  17 substances from circulation in society and  18 those substances sometimes could have  19 obviously very good public health effects.  20 However, I think that, that, that we could  21 never forget that the most important function  22 is, is not how some substances listed have  23 some, might have some good effects in one  24 form or another that doesn't consist cancer,  25 but that the principal function is the</p>



<p style="text-align: center;">Page 33</p> <p>1 public health effect of listing the substance 2 and the public health effect of protection 3 that happened in society with a substance 4 that's specifically identified and put it in 5 the list. You started by saying that it's 6 important to have list... I fully agree with 7 you, it's important to have list, so, so 8 that public health function I think is, is 9 starting out really important, so thank you 10 very much.</p> <p>11 DR. GOLDMAN: Okay, all right, 12 thank you, thank you, there's one more 13 comment.</p> <p>14 MS. FELTER: Susan Felter. 15 It's a question. Are transcripts available on 16 NTP's website or anywhere else from that 17 1999 meeting?</p> <p>18 DR. GOLDMAN: The question is 19 whether there's a full transcript available 20 from the 1999 meeting. I think that what's, 21 what we have are the, we have minutes that 22 were posted, but Bill?</p> <p>23 DR. JAMESON: Yes, the, the 24 transcript from the, from the 1999 meeting 25 actually are on, on our website. If you go</p>	<p style="text-align: center;">Page 35</p> <p>1 repaired, prepared in response to the Public 2 Health Service Act that was passed in 1978 3 and that Act stipulates that the Secretary 4 of Health and Human Services shall publish 5 an annual report that lists all substances 6 which are either known to be human 7 carcinogens or reasonably anticipated to be 8 human carcinogens and to which a significant 9 number of persons residing in the United 10 States are exposed. This law was amended in 11 1993 to, to make it a biannual report. 12 Mainly because of the time involved in 13 putting it together, we, we had a very 14 difficult time getting the report together on 15 a, in a one year period. What I put up 16 here and actually this is some material that 17 was, that's provided to you in your packets 18 or, or out front is, is the criteria and I, 19 I specifically made a slide of the criteria 20 as it's published on the web page so that 21 everybody can see what the, what the basis 22 is of listing materials either as known or 23 reasonably anticipated human carcinogens. 24 Very briefly, I don't want to read all of 25 the criteria, but very briefly, okay, for a</p>
<p style="text-align: center;">Page 34</p> <p>1 to our website and go to the part where we 2 discuss the 1999 meeting, the, the transcript 3 is there.</p> <p>4 DR. GOLDMAN: Excellent, 5 okay, Bill, why don't you come forward now 6 and Bill is going to give us an overview of 7 the history and review process for the 8 Report on Carcinogens.</p> <p>9 DR. JAMESON: Well, thank you 10 and good morning, I would like to also 11 welcome everybody here and, and thank you 12 for braving the elements to come in and 13 participate in this meeting. I'd like to 14 thank Dr. Goldstein for his presentation, I 15 think he, he presented a very clear and 16 concise summation of what was discussed at 17 the meeting and what I plan to do here is 18 to go through the, the proposed process and 19 identify where we have made some changes or 20 revised our process in response to the 1999 21 meeting. Kind of repeating some of the 22 things that Dr. Goldstein has talked about 23 in his presentation.</p> <p>24 First of all, just as a kind of an 25 introduction, the Report on Carcinogens is</p>	<p style="text-align: center;">Page 36</p> <p>1 known human carcinogen there must be 2 sufficient evidence from studies in humans 3 which indicate a causal relationship between 4 exposure and, and human cancer. For the 5 reasonably anticipated category, it can be 6 limited evidence in, in, from studies in 7 humans. But there are other situations where 8 confounding could not be completely 9 eliminated from, from the evidence or there 10 is sufficient evidence from studies in 11 animals... in laboratory animals where an 12 increased incidence of malignant or a 13 combination of malignant and benign tumors 14 are, are induced by exposure to the 15 particular material, or there is less than 16 sufficient evidence of carcinogenicity in 17 humans or laboratory animals, but the 18 nomination or the material belongs to a well 19 defined structurally related class of 20 substances whose members are listed in 21 previous Reports on Carcinogens as either 22 known or reasonably anticipated carcinogens. 23 And the paragraph in the box, if you will, 24 that conclusions regarding carcinogenicity in 25 humans and experimental animals are based on</p>

<p style="text-align: center;">Page 37</p> <p>1 scientific judgment with consideration given  2 to all relevant information, and this is an  3 important point because when the criteria was  4 revised in 1996 the inclusion of  5 consideration of all relevant information  6 meant that, that mechanistic information was  7 a, was an integral part of the review for  8 listing something in the Report on  9 Carcinogens. At the time that we were  10 putting together the 9th, excuse me, Report  11 on Carcinogens there was a number of  12 comments that were coming in that people  13 were confused by what exactly did we mean by  14 human studies. And so we published a  15 clarification in the Federal Register, which  16 is, which is shown, shown here and basically  17 what it, what it indicated was that some  18 question had arisen about what we meant by  19 human studies to be listed as a, as a known  20 human carcinogen, and that the known human  21 carcinogen requires, I want to read this to  22 make sure I don't make a mistake, the known  23 human carcinogen category requires evidence  24 from studies in humans, this can include  25 traditional cancer epidemiology studies, data</p>	<p style="text-align: center;">Page 39</p> <p>1 forum. So what I'd like to do is to really  2 address what changes or modifications we've  3 made to the process since 1999 in the  4 following slide.  5 First, I want to discuss the  6 nominations. As, as in the past we always  7 solicit nominations from the outside, we go  8 out with announcements in, on our NTP list  9 server, we take advantage of Federal Register  10 notices when we're announcing new nominations  11 to ask people if they have other nominations  12 that they want us to consider to please  13 submit them to the NTP for consideration for  14 listing or de-listing from the Report on  15 Carcinogens. At the time of the 1999  16 meeting, the evaluations of the nominations  17 for formal review, at the time I took  18 advantage of, of the RG1, the NIEHS review  19 committee to help me identify the nominations  20 and make sure that, that there was  21 sufficient preliminary information for a  22 nomination before we proceeded with getting  23 approval to review a nomination for listing  24 in the report. Well, one of the  25 modifications are... that we are making for</p>
<p style="text-align: center;">Page 38</p> <p>1 from clin..., clin..., excuse me, clinical  2 studies and/or data derived from the study  3 of tissues from humans exposed to the  4 substance in question and useful for the  5 evaluating whether relevant cancer  6 mechanism....mechanisms is operating in  7 people. So we just wanted to clarify what  8 was meant by human studies.  9 In this slide I, I put up the review  10 processes, we discussed it at the 1999  11 meeting and I wanted to use this as a basis  12 to say most of the comments and issues that  13 were brought up dealt with the nomination  14 and the preparation of the background  15 document which is essentially this part of  16 the process before it goes on to the  17 scientific review by the three review  18 committees, which include the NIEHS review  19 committee or what we refer to as the RG1,  20 the interagency working group, which is made  21 of representatives from the NTP executive  22 committee or the RG2 and the NTP Board of  23 Scientific Counselors ROC subcommittee which  24 we refer to as our external peer review  25 meeting, which is, which is held in a public</p>	<p style="text-align: center;">Page 40</p> <p>1 all future Report on Carcinogens, and Chris  2 Portier was, was, pushed that we, we make  3 this a separate operation. We've established  4 an NIEHS nomination committee, which is  5 independent of the RG1. This NIEHS nomination  6 committee is made up of NIEHS staff  7 scientists who get together and review the  8 list of nominations that my staff have been  9 able to pull together from solicited  10 nominations from outside or from nominations  11 that, that we've been able to identify by  12 our perusal of the, of the literature or the  13 publication of other documents such as IARC  14 or EPA identification of, of potential  15 carcinogens for listing in the Report on  16 Carcinogens. This NIEHS review committee  17 looks at all the preliminary information we  18 are able to gather or have been, or was  19 submitted with the nomination and they say  20 in their opinion there is sufficient  21 information for us to pursue a formal review  22 of the nomination. Once we, we go through  23 that exercise, first we go to, to Dr.  24 Portier as Director of the Environmental Tox  25 program and, and get his approval and then</p>

<p style="text-align: center;">Page 41</p> <p>1 we go on to the director of NTP who  2 ultimately has to give us his okay that we  3 can proceed with a formal review of the  4 nominations. Once we get the okay, the  5 approval from the Director, we go out with a  6 Federal Register announcement with our intent  7 to review a particular nomination and we  8 solicit public, public comments on the  9 nomination and we specifically ask at this  10 time for, for any people who have an  11 interest in, in the particular material we're  12 looking at to identify issues that we need  13 to address in the course of our review of  14 the nomination. This was one of the issues  15 as Dr. Goldstein indicated that at the 1999  16 meeting that, that people indicated that,  17 that issues surrounding the nomination needed  18 to be identified. And we go out with our  19 Federal Register notice announcing that we  20 intend to review these materials for possible  21 listing or de-listing from the Report, and  22 we solicit anyone with any information to  23 please identify the issues that they feel  24 are important for us to consider in the, in  25 the course of our review.</p>	<p style="text-align: center;">Page 43</p> <p>1 some of the comments that were made in the  2 1999 meeting we have increased our effort to  3 try to identify outside experts that would  4 be willing to help us in the preparation of  5 these background documents. And, and to, to  6 try to elaborate on this, I've broken it  7 down as how, how we have revised the process  8 that we've gone through the, the nominations  9 for the different editions of the Report on  10 Carcinogens. For the 10th Report on  11 Carcinogens, some of the background documents  12 were drafted or reviewed by, by nomination  13 specific experts. As we initiated our work  14 on the... on the 10th back in 1990...1999,  15 I'm sorry, 1998 and 1999, we made a  16 concerted effort to try to identify experts  17 that, that had some experience in, with a  18 particular nomination and solicit their help  19 in either preparing different sections of the  20 background document or at least reviewing a  21 background document and giving us their  22 comments as to the adequacy of the, of the  23 information contained in the background  24 document and the issues identified in the  25 document. The way we identify these experts</p>
<p style="text-align: center;">Page 42</p> <p>1 As with all public comments that,  2 that we receive concerning the solicitation  3 of information, the comments we receive on  4 a, on or for a nomination are placed on the  5 web and become part of the public record. In  6 addition as par... as part of the review  7 process all the review committees also get  8 the, any public comments that we've received  9 in the course of their review, included in  10 the package are the public comments we  11 received in response to comment for a  12 particular nomination. Another area where we  13 have made a number of changes for the, for  14 the process is in the preparation and  15 distribution of the background documents that  16 we prepare for each of the nominations.  17 Briefly when we say that the background  18 documents are prepared with the, with the  19 support of a, of a contractor that we have  20 for the RoC process or for the RoC group and  21 taking the recommendations that were  22 identified or acting on some of the  23 recommendations that were, were, were made at  24 the last meeting, the 1999 meeting, excuse  25 me... I'm sorry.... based on some of the,</p>	<p style="text-align: center;">Page 44</p> <p>1 is basically is to do as thorough a  2 literature search as we can on the substance  3 and identify people who have published  4 extensively on the material in the literature  5 and go to these individuals and ask them if  6 they'd be willing to help us.  7 So the background document is  8 prepared and for the 10th Report on  9 Carcinogens and again in, this is in  10 response to some of the comments that were  11 made in the 1999 meeting. The background  12 documents are revised, were revised after the  13 RG1 and then also revised after the RG2  14 meeting so that, basically the comment was  15 that, that by doing this, providing the  16 public comments to the RG1 they could look  17 at the public comments, look at the  18 background documents and comment on the  19 document and, and make recommendations for  20 revisions if necessary and the same for RG2.  21 So in response to that comment that's why we  22 did this particular process for the 10th  23 Report.  24 After the RG2 had completed their  25 review of, of the nomination and made their</p>

<p style="text-align: center;">Page 45</p> <p>1 recommendation, then the background document  2 became the document of record and was put,  3 made available to the public. Either we  4 may, we put out a Federal Register  5 announcement indicating that the documents  6 were available and if anybody wanted to get  7 a copy to, we'd be happy to send one to  8 them, and then we also put them up on the  9 web site, excuse me... and made them  10 available to the public and this was at  11 least 60 days before the Board of Scientific  12 Counselors, the RoC subcommittee met to  13 review the nominations giving, giving people  14 time to, to look at the background document  15 before the public meeting and giving them  16 the opportunity to come to the public  17 meeting knowledgeable of what was in the  18 background document and being able to make  19 their comments at that time.  20 For the 11th Report on  21 Carcinogens...oh, by the way, the 10th Report,  22 the 10th edition of the Report on  23 Carcinogens was published in, in 2002. For  24 the 11th report, we, we, before we started  25 our reviews, we stepped back and, and looked</p>	<p style="text-align: center;">Page 47</p> <p>1 have more consistency... we allow the, the  2 reviewers of a nomination to have the same  3 document to review and to make their  4 recommendations, so all three reco..., all  5 three scientific review groups have the same  6 document of record to look at and to apply  7 the criteria and make their recommendation.  8 For the 11th Report on Carcinogens the  9 background documents or records were made  10 available on the NTP website either right  11 after the RG1 review, 9 of the 13 background  12 documents were up on the web right after RG1  13 review or 4 of the 13 were up on the web  14 after the RG2 review, after the second  15 review, but all of the background documents  16 for the 11th Report on Carcinogens were up on  17 the web and people notified of their  18 availability at least 90 days before the,  19 the public meeting of the RoC subcommittee.  20 For future RoC nominations, what we  21 plan to do is to continue to prepare the  22 background documents with the assistance of  23 nomination specific experts. We again will  24 try to identify individuals who'll help us  25 prepare or at least review the background</p>
<p style="text-align: center;">Page 46</p> <p>1 at how things were working and actually it  2 was at the insistence of Dr. Portier that he  3 felt that we needed to make the background  4 document available to the public earlier in  5 the process than waiting until the RG2 had  6 completed it. So, for the 11th Report on  7 Carcinogens most of the background documents  8 were drafted and/or reviewed by nomination  9 specific experts. I think we, we prepared  10 13 background documents for the nominations  11 under consideration for the 11th and, and all  12 but two had input from outside expert  13 consultants, two we, we just could not  14 identify anybody to help, help with those  15 two background documents. For the 11th  16 report, once the RG1 had reviewed the  17 background document and, and said that the  18 background document was acceptable for  19 reviewing the nomination, applying the  20 criteria and making a recommendation, then we  21 identified that or I identified that as a  22 document of record and it is at that point  23 that we try to make it avail..., we tried to  24 make it available to the public as soon  25 after that as possible. By doing that, we</p>	<p style="text-align: center;">Page 48</p> <p>1 good thorough document. The RG1 again will,  2 will be asked to look at the background  3 document and to give us their opinion as to  4 the adequacy of the document for reviewing a  5 nomination, applying the criteria and making  6 a nomination... or making a recommendation,  7 excuse me. Once the RG1 has, has looked at  8 the background document and, and said yes,  9 we will accept this document for our review  10 of the nomination, what we will now do is we  11 will take the background document and publish  12 it on the NTP website and it will be on the  13 NTP website for at least 45 days before any  14 review of a nomination takes place. So  15 before the RG1 review takes place, the  16 background document will be available on the  17 web, are made available for people to see  18 and, and if they care to make, make any  19 comments, we'd, we'd be more than happy to  20 receive them.  21 Moving on to the actual review  22 process, the review process itself is other  23 than, than the availability of the background  24 document and, and the RG1's involvement in  25 looking at the background document and making</p>

<p style="text-align: center;">Page 49</p> <p>1 an acc... I'm sorry, accepting the background  2 document for the review of the nomination,  3 the review processes continue, will continue  4 to remain pretty much the same. The first  5 review is by the NIEHS review committee, the  6 RG1, they will review the background document  7 and make their independent recommendation  8 for, for listing or, or not listing or de-  9 listing depending on what the nomination was  10 for. After the RG1 review it'll go on to the  11 RG2, the Executive Committee interagency  12 working group, they will be given the same  13 document of record and they will review the  14 nomination, apply the criteria and make their  15 recommendation. Following the, the RG2  16 review as, as has been the process in the  17 past, we will send out a Federal Register  18 Notice announcing the public meeting of the  19 Board of Scientific Counselors RoC  20 subcommittee. In that announcement we will,  21 we will invite individuals to come attend  22 the meeting and if you care to make a public  23 comment, to please come to the meeting and,  24 and address the, the nomination to the  25 committee. In response to some of the</p>	<p style="text-align: center;">Page 51</p> <p>1 the nomination and we include in the Federal  2 Register all the recommendations that have  3 been made by the three scientific review  4 groups. We include what the recommendation  5 was and what the vote for, for the  6 recommendation was. Following receipt of the,  7 of the public comments from the final  8 Federal Register Notice, we take all the  9 recommendations to our NTP Executive  10 Committee. Our NTP Executive Committee looks,  11 reviews the nominations, discusses the, the  12 recommendations that have been made by the  13 three scientific review committees and then  14 make their own recommendation to the Director  15 for listing, not listing or de-listing  16 depending on what the nomination was.  17 Following that review, all of the  18 information, all three review committees'  19 recommendations, all the public comments that  20 we've received, the recommendation of the NTP  21 Executive Committee itself, all this  22 information is pulled together and we bring  23 it to the Director of the NIEHS/NTP for his  24 consideration and his final recommendation as  25 to what should be included in the report</p>
<p style="text-align: center;">Page 50</p> <p>1 comments that were made at the 1999 meeting  2 and as Dr. Goldstein indicated, we have  3 increased the time allotted for people to  4 make their comment to the Board. Initially,  5 initially it was people were limited to five  6 minutes, we've expanded that to seven minutes  7 and at the discretion of the chairman can be  8 expanded to up to ten minutes depending on  9 how many people we have commenting on a  10 particular nomination. So we've expanded the,  11 the amount of time that people can, can  12 address the, the Board during a public  13 meeting. Again the Board subcommittee listens  14 to the public comments, any written public  15 comments that we receive in response to this  16 particular Federal Register Notice, that  17 information is also provided to the Board of  18 Scientific Counselors and, and published on  19 the NTP website and is made part of the  20 public record and the board reviews the  21 nomination and makes their recommendation.  22 Following that recommendation, we go out with  23 our third and final Federal Register Notice  24 concerning this particular set of nominations  25 where we solicit final public comment on, on</p>	<p style="text-align: center;">Page 52</p> <p>1 and, and in what category. After the  2 Director of NIEHS/NTP makes, makes his final  3 determination then the, the, the draft of  4 the final edi.... of that edition of the  5 Report on Carcinogens is, is completed and  6 forwarded on to the Secretary's office and  7 the Secretary's office takes the, the reports  8 with the recommendations for, for the  9 listings, reviews the document. The process  10 is, a lot of times is the Secretary's office  11 will come back to us with questions for  12 clarification or whatever and then once the  13 Secretary is, is satisfied with the document  14 it's, becomes the final document and is  15 forwarded on to, to Congress. And, and when  16 the Secretary forwards the report on to  17 Congress is our definition of when the  18 report is published. Requirement is, like I  19 said, every two years, the 11th report I  20 forgot to mention that we just completed all  21 our reviews. The 11th report is scheduled to  22 be published this year in 2004 and we're  23 currently going to start working on the 12th  24 report, which would be due in 2006.  25 Just to follow up, in our response</p>

<p style="text-align: center;">Page 53</p> <p>1 to the, to the 1999 meeting that was                  2 published on the web there were several                  3 issues that were identified as under                  4 consideration and I just wanted to very                  5 briefly go over these and, and bring you up                  6 to date on the status of them. The first                  7 one was to create separate groupings within                  8 the Report on Carcinogens according to                  9 intended use. This was a recommendation that                  10 had been made by, by a number of individuals                  11 and we addressed that, we, we actually, when                  12 we were preparing the 9th Report on                  13 Carcinogens, we, we addressed having the                  14 categories separated for intended use, but                  15 after looking at the report, getting input                  16 from, from our NTP Executive Committee, from                  17 the Board of Scientific Counselors and also                  18 from the Secretary's office, it was decided                  19 that the current format of the Report on                  20 Carcinogens where we just listed the material                  21 in the two categories is, is the most                  22 appropriate, and, and so we will continue to                  23 do that for, for all future reports for the                  24 time being. The other two were, were issues                  25 that, that Dr. Goldstein emphasized in his</p>	<p style="text-align: center;">Page 55</p> <p>1 consul... in consultation with their                  2 physician do their own assessment as to the                  3 benefit of taking or not taking the                  4 material. So we do work with our regulatory                  5 agencies to try to address these two issues                  6 and we will continue to do so in the future,                  7 and that's it from me, and I'd be glad to                  8 try to respond to any questions.                  9 DR. GOLDMAN: Yeah, Bill, I'm                  10 going to go ahead and lead off with a couple                  11 of questions. First I wanted to make more                  12 of a comment that I hope just makes it very                  13 clear to the people in the audience exactly                  14 where today's meeting fits in with various                  15 Reports on Carcinogens, because I think it's                  16 always important when people are coming in                  17 and, and, and in participating for them to                  18 know what they can actually affect and what                  19 they can't affect, and my understanding, and                  20 correct me if I'm wrong, is that the 11th                  21 Report on Carcinogens which is due to come                  22 out this year is basically in its final                  23 stages of having recommendations brought                  24 forward to the Secretary for the Secretary's                  25 decision, and that this meeting cannot affect</p>
<p style="text-align: center;">Page 54</p> <p>1 talk, one was to ask applicable regulatory                  2 agencies to consider communicating                  3 information about possible regulatory                  4 implications of listing and de-listing and                  5 the other one was to work with regulatory                  6 agencies to identify additional venues and                  7 strategies for targeting communications about                  8 policy with broad group of stakeholders. We                  9 continue to work with the regulatory agency                  10 representatives within the Executive                  11 Committee and on our review committees to,                  12 to pursue this. There have been some, some                  13 examples where when we listed materials, we                  14 have joint statements by both the NTP and                  15 the regulatory agency about a particular                  16 listing. For example, the Tamoxifen as, as                  17 Dr. Goldstein brought up. When, when                  18 Tamoxifen was listed in the 9th Report on                  19 Carcinogens, when the report was released, a                  20 statement, a joint statement was released by                  21 NTP and FDA and then NCI about Tamoxifen                  22 and, and while it has been shown to be a                  23 human carcinogen, it also has very beneficial                  24 uses for the treatment of ca.. of breast                  25 cancer and that individuals should in</p>	<p style="text-align: center;">Page 56</p> <p>1 that process, because that process is nearly                  2 completed. However, that the 12th Report on                  3 Carcinogens has not yet gone into the                  4 scientific review process and that in fact                  5 this meeting can affect the review process                  6 for the 12th report, is that correct?                  7 DR. JAMESON: That's correct.                  8 DR. GOLDMAN: So, just so that                  9 people understand, you know, that... I mean                  10 if you have a need or wish to have an                  11 effect on the process for the 11th Report,                  12 there probably are ways to do that and...                  13 but not this particular meeting, is not a                  14 way to do that, and could you be precise                  15 about where that 11th report is at this                  16 phase, has it gone through the Executive                  17 Committee, is it with the Director of the                  18 NIEHS?                  19 DR. JAMESON: The... as it                  20 stands right now the, the, the... when we,                  21 when we, let me back up just for the point                  22 of clarification, when we review nominations                  23 for the, for a particular edition of the                  24 report, for the 11th report, we usually break                  25 the nominations into, review half of them or</p>

<p style="text-align: center;">Page 57</p> <p>1 a portion of them one year and then the  2 second half the second year. We've completed  3 review of all the nominations for both the  4 first half and the second half and the  5 second half... we, we are taking those to  6 the Executive Committee in February and, and  7 then hopefully very shortly thereafter we'll  8 have all the information we need and can  9 present it to the, to the Director.  10 DR. GOLDMAN: Okay...  11 DR. JAMESON: At that time,  12 right, shortly after that.  13 DR. GOLDMAN: ...so that's  14 kinda where it is just so that people know  15 that some of it has gone to the Executive  16 Committee, some of it's going to go to the  17 Executive Committee and is on its way to the  18 NIEHS Director, and so in terms of the 12th  19 report though, that it's going to be... this  20 isn't, you know, very much, very timely...  21 DR. JAMESON: Right.  22 DR. GOLDMAN: ...and, and can,  23 and can have an effect. The, the other thing  24 that I wanted to, to raise really is just as  25 a point of clarification...</p>	<p style="text-align: center;">Page 59</p> <p>1 want to give you a little bit about my  2 philosophy on this and where we're leading  3 the program on this, but also some  4 additional clarification. First of all, the  5 45 days is a target, it's not an absolute.  6 But Bill said at least 45 days, well, that's  7 our target, I want to make that very clear.  8 We're going to try to achieve a 45 day lead  9 time, but since the RG1 meetings are not  10 regularly announced, they're not public  11 meetings anyway, we're, we're... it could be  12 well in excess of that or it could be  13 potentially slightly less, but that is our  14 target for that. The second issue is the,  15 the question of the acceptability of a  16 document and what we're trying to do here  17 with the process. If RG1 looks over a  18 document and concludes it's inadequate for  19 the review, that can happen two different  20 ways, one is that the NIEHS nomination  21 committee made a mistake and RG1 is in  22 disagreement with them that there's enough  23 information here to do a... to list a  24 compound. That would not disqualify the  25 background document and we may well continue</p>
<p style="text-align: center;">Page 58</p> <p>1 DR. JAMESON: Mm-hmm.  2 (Indicating affirmatively.)  3 DR. GOLDMAN: You said that  4 prior to beginning the scientific review  5 process that the RG1 looks at the background  6 document to see if it is suitable for the  7 scientific review process, and if it is  8 suitable then it will be placed on the web  9 for 45 days before that process begins.  10 What if it isn't suitable, what is the  11 process that you use?  12 DR. JAMESON: Well, if, if  13 we bring it to the, to the RG1 and they  14 look at the document and they tell us it  15 doesn't contain sufficient information for us  16 to apply the criteria, it doesn't contain...  17 We c..., we cannot apply the criteria because  18 it's lacking in information in either the,  19 the animal section or the human section or  20 something, then we would have to go back,  21 address their concerns, work on it again  22 and, and revise it and bring it back.  23 DR. GOLDMAN: Okay. Dr.  24 Portier?  25 DR. PORTIER: Yeah, Lynn, I</p>	<p style="text-align: center;">Page 60</p> <p>1 hopefully if all the review committees were  2 doing the same thing they'd all say  3 insufficient evidence to list, don't put it  4 on the list. If on the other hand they find  5 factual problems with the document, factual  6 errors of interpreta.... of, of presentation  7 because hopefully our experts are not  8 interpreting the material for us, they are  9 presenting the material to us, then in fact  10 that would go back for clarification and  11 correction. One thing Bill also forgot to  12 mention is that once the document becomes  13 the document of record the NTP does not  14 intend to change that document, but the  15 document will build, as we receive public  16 comments on the document, they will be  17 appended and noted that they are appended to  18 the document for any future review groups.  19 The issue here is that I feel fairly  20 strongly that it's not up to the program to  21 interpret the public comments that are coming  22 to us as part of these, this review process.  23 We have three very competent review groups  24 that provide us with advice on this issue,  25 we leave it up to them to interpret the, the</p>

<p style="text-align: center;">Page 61</p> <p>1 to the background document that we have  2 here. So they get appended and they get  3 noted and we do our best to try to bring  4 them to the attention of our review groups  5 as they begin this review process. Again  6 the philosophy is, the program is not  7 responding to these public comments, nor do  8 we actually own the background document,  9 it's, it's something to facilitate the  10 discussion and facilitate the review and we  11 want it to be as scientifically correct as  12 possible.  13 DR. GOLDMAN: The, the last  14 question that I wanted to, to put to you  15 before opening it up for more questions and  16 discussion is the role as you see it of the  17 NTP Executive Committee in this, and I'm, I,  18 I'm realizing from the written comments that  19 there are comments about this, but I think  20 that it might be important for you to  21 explain what role, what function that step  22 has and how that's different than the RG1  23 and 2 processes and Chris, maybe you would  24 like to respond to that?  25 DR. PORTIER: Yes, I will.</p>	<p style="text-align: center;">Page 63</p> <p>1 sought as well. The Executive Committee may  2 or may not vote on a particular nomination  3 as to whether or not the Director should  4 choose one decision or another. All of the  5 discussions that go on at the Executive  6 Committee are privileged, they are federal  7 agencies talking to federal agencies so I'm  8 not going to get into a lot of detail about  9 how that process works and what their actual  10 role might be because it changes depending  11 upon the agent we're looking at, and what  12 our concerns may or may not be on that  13 agent, does that help, Lynn?  14 DR. GOLDMAN: Yeah, and I  15 can... I can make, you know, a brief  16 comment, I chaired that committee for a  17 while, and I'm not with the federal  18 government and I never signed a statement  19 saying I wouldn't talk about what happened  20 there, and it, it was not a technical review  21 process in the way that the RG processes  22 were. It was on a different level, it, I  23 think, was useful to Dr. Olden to hear from  24 the leadership of the other agencies what  25 they thought, because it's a lot of weight</p>
<p style="text-align: center;">Page 62</p> <p>1 I, I guess I should have brought slides of  2 what is the NTP to lead us into this. The  3 National Toxicology Program is not one  4 agency, it is not just NIEHS's own little  5 project, it's a multi-agency federal program,  6 three agencies form the core, they're all  7 within HHS, the Directors of those three  8 agenc..., agencies sit on the Executive  9 Committee of the National Toxicology Program,  10 that is NIEHS, FDA and CDC NIOSH, their  11 heads or their designates sit on the  12 Executive Committee. The Executive Committee  13 is also making a recommendation to the  14 Secretary through the Director of NIEHS about  15 the listings in the Report on Carcinogens,  16 so their opinion is very important to the  17 final recommendations that go forth from the  18 Director of NIEHS to the Secretary of Health  19 and Human Services. Other members of the  20 Executive Committee are not necessarily part  21 of HHS, but again represent some very  22 important federal partners as part of the  23 NTP and contribute substantially to our  24 process and our evaluations and all aspects  25 of the program, and so their opinion is</p>	<p style="text-align: center;">Page 64</p> <p>1 on his shoulders to make the recommendation  2 to the Secretary, it helped to bring out  3 into the open, if there were any possible  4 disagreements or issues to have that out in  5 the open as opposed to people, you know,  6 individually going to the Secretary and  7 expressing their views. It's a healthy  8 process to have those different views aired  9 around the table instead of handled that  10 way. And it did help to surface things like  11 the Tamoxifen kind of concern that, gee, if  12 this is listed it might help to have a  13 statement from the FDA about what it means  14 and to try to head off inappropriate  15 responses by the users of the product down  16 the line that they would overreact possibly  17 to the listing, so I, I, I, I felt that it  18 played a useful role, but I think that it  19 could probably be a little bit more clearly  20 explained what that role is having seen, you  21 know, some of the comments and that's why I  22 wanted to kind of bring that out. Opening  23 the mic's here for other questions or  24 comments for Bill Jameson about the process  25 and how it's changed and what might be</p>



<p style="text-align: center;">Page 65</p> <p>1 contributed here today.  2           SPEAKER: Focusing just a  3 couple of questions following up what Dr.  4 Goldman asked. The, if, if the background  5 document is accepted by RG1 as the, as the  6 document of record, does that mean that the  7 word draft shouldn't be on the cover? 'Cause  8 sometimes they say draft and then they're  9 not revised.  10           DR. JAMESON: Right, that,  11 that's correct, there are, we have some,  12 some... we need to clean up our website,  13 there are some there that still have draft  14 on it that, that should be final, thank you.  15           DR. GOLDMAN: And just a  16 reminder to identify yourselves if you have  17 questions or comments.  18           MS. LE HURAY: Okay. Well,  19 I'm Ann Le Huray with the American Chemistry  20 Council, and following on that, I guess that  21 I don't understand two things about that  22 process with the document of record, or  23 three things actually. One is why would it  24 be inconsistent with making of the document  25 of record to have a round of public review</p>	<p style="text-align: center;">Page 67</p> <p>1 that way, it's the Executive Committee that's  2 their higher level people and agencies.  3           MS. LE HURAY: But, but the  4 Board of Scientific Counselors subcommittee,  5 they, they bring their own thoughts about  6 what is or isn't scientifically important  7 about a nomination to the review and if they  8 disagree or have issues with the way  9 something is presented in the background  10 document, that's never appended anywhere,  11 that's never recorded anywhere, so that  12 can... that just becomes an ephemeral and  13 even if it's the basis of their decision  14 that's just an ephemeral point, so...  15           DR. GOLDMAN: Well, I think, I  16 think we can take most of that kind of as a  17 comment, I think that, you know, those are  18 points well taken. Dr. Jameson, are there  19 points of clarification that you want to  20 make?  21           DR. JAMESON: Just to, to  22 address your last point about if... if  23 review committee looks at a background  24 document and fear..., and feels that the  25 background document is not... doesn't contain</p>
<p style="text-align: center;">Page 66</p> <p>1 final. I don't understand why that would be  2 inconsistent with the process. Second is if  3 there are in fact, you know, if you don't  4 have a round of public review and it comes  5 out with errors in it and then you say, you  6 know...and subsequent you build on it by  7 attaching public comments to it, how, how is  8 that consistent with the Data Quality Act,  9 you know, you're putting out information  10 there that is incorrect, and even though  11 you're putting in public comments that may  12 have corrections, that, that's different than  13 having a document with NTP's name on it that  14 contains incorrect information, and thirdly  15 by calling it the document of record that  16 implies that reviewers after the RG1, for  17 example, RG2 and the BSC subcommittee will  18 be using that document as... to form the  19 basis of their decisions, but what if...  20 perhaps RG2 wouldn't, because as Dr. Goldman  21 says perhaps it's not as technical a review,  22 but what if the....  23           DR. GOLDMAN: I meant the  24 executive com... not the RG2. The RG2 is  25 technical. I'm sorry if I, if you heard me</p>	<p style="text-align: center;">Page 68</p> <p>1 to, something added to the, to the document,  2 we have, we have allowed for that, in fact  3 there, there have been background documents  4 that we reviewed for the 11th report and I  5 should have mentioned that in my presentation  6 and I apologize. If, if a review committee,  7 the RG1, the RG2 or the board gets a, a  8 background document and reviews, reviews a  9 background document and they feel it is  10 inadequate because it didn't contain enough  11 information in a particular area, if they  12 felt that we...a particular paper was not  13 included that should have been included,  14 whatever...we give, we give the, each of  15 the, each of the review committees the  16 opportunity to, to write a commentary about  17 the background document, and that commentary  18 then becomes part, part of the record for,  19 for the nomination. And in fact the RG2 did  20 that for our review of Cobalt Sulfate. They  21 felt that, that the information in the  22 background document on, on production and use  23 of Cobalt Sulfate was insufficient and  24 unclear and they felt strong enough about  25 that that they, they prepared an addendum or</p>

<p style="text-align: center;">Page 69</p> <p>1 a commentary to, to the background document  2 and that became part of the public record.  3 So as the, as the document goes through the  4 review committees, if the review committees  5 have a serious concern about the, the, the,  6 the background document, they feel something  7 is left out or, or should have been included  8 or added, then, then that can be appended to  9 the document as a commentary from that  10 particular review group.  11 DR. GOLDMAN: Were there any  12 other... wait, I think there was one more  13 comment from the audience and then, before  14 we go to the... I'd like to take the  15 comments from the, from the audience first.  16 MR. KELLY: Bill Kelly with  17 the Center for Regulatory Effectiveness. It  18 occurred to me on my way to the meeting just  19 today that although we submitted detailed  20 written comments on the process there was a  21 significant issue that we had totally  22 overlooked and that hasn't been spoken about  23 today. And it may have to do with just the  24 way that the procedures are written up that  25 talks continually about a background</p>	<p style="text-align: center;">Page 71</p> <p>1 just in the way things are worded just in  2 that first paragraph of the listings. One  3 example that comes to mind is alcoholic  4 beverages and I'm not sure whether that is  5 one of the ones that got changed slightly  6 from what was in the background document,  7 but that's a good example. Exactly how that  8 was phrased in terms of the quantity that  9 might be known to induce cancer was an  10 important issue and there were some  11 subtleties in the wording of that particular  12 listing in the RoC. So that, that issue of  13 when do we see the language of the listing  14 and when do we get a chance to comment on  15 that has not specifically been addressed,  16 perhaps you could comment on that.  17 DR. JAMESON: Well, maybe we  18 could.... maybe that's something we, we need  19 to address in the future, we'll see. I'd  20 like to see what we get from the rest of  21 the meeting and, and identify these issues.  22 DR. GOLDMAN: Chris?  23 DR. PORTIER: It, it does  24 point... I, I think it's a suggestion worth  25 considering and we will, we will give it</p>
<p style="text-align: center;">Page 70</p> <p>1 document, previously addressed background  2 document, but I know on a number of  3 occasions the way the actual listing is  4 written and put in the Report on Carcinogens  5 does not... is not necessarily the same as  6 what's in the background document. I know a  7 number of chemicals for which the actual  8 listing language has changed after the entire  9 review process was finished and so the  10 question is when does the public learn what  11 the listing is actually going to say and  12 should it not have an opportunity to comment  13 on that actual listing language, or should  14 the background document in effect say, this  15 is what we're proposing as the actual  16 listing language and then again that raises  17 the issue of well, if this is the final  18 document of record, what does that mean with  19 regard to the listing language, does that  20 mean it can't be changed after that or, or  21 what? But there is this difference between  22 background document and the listing language  23 that goes in the final RoC and the public's  24 opportunity to comment on that. Sometimes it  25 can be very important, there are subtleties</p>	<p style="text-align: center;">Page 72</p> <p>1 our, our best consideration. I did want to  2 point out one thing though. The, the  3 historical background documents did in fact  4 come into the review process with a flavor  5 in them of where this review was going. So  6 there was some suggestion as you read the  7 documents that this probably should be  8 reasonably anticipated or this probably  9 should be a known human carcinogen. Part of  10 this splitting I'm having between RG1 and  11 the development of the, of the nominations  12 in this independent background document  13 production is in fact to cause that  14 separation. So whereas historically there  15 might have been some indication of the, in  16 the background document as to what would go  17 into the final RoC document, that is not  18 required nor is it suggested nor should it  19 actually scientifically be there. The  20 background document should be facts,  21 statements about the evidence that's, that's  22 there, but no objective evaluation of whether  23 it should be listed or not. And since the  24 final listing in the RoC is a discussion of  25 the final opinion of the Secretary as to</p>

<p style="text-align: center;">Page 73</p> <p>1 whether it should be listed or not, it's, 2 it's not necessarily something that would be 3 reflected in the background documents 4 anymore. 5 DR. GOLDMAN: Okay, so that's 6 food for thought. 7 DR. MOURE-ERASO: Now as 8 having been part of the process, I, I think 9 that I did find especially with the advent 10 of the Internet and the web sites that a 11 very rich way of understanding how were the 12 reactions of the, of the Board of Scientific 13 Counselors to the decisions of the RG1 and 14 RG2 appear in the discussions that are 15 printed in the, in the minutes of the 16 meeting of...so, so there is a record of the 17 reasons why there might be sometimes a 18 divergency of, of, of, of recommendations, 19 and as you said in your, in your... is like 20 there are three separate recommendations with 21 the reasons that are given in detail in the 22 minutes of the discussions. So, for anybody 23 that want to know the process by which the 24 final decision came, you can see that it 25 might be that the RG1, RG2 and the Board of</p>	<p style="text-align: center;">Page 75</p> <p>1 the RG1 completes its review and makes its 2 recommendation there is a summary of the 3 recommendation that is prepared, which 4 includes the vote for, of the rec..., of the 5 recommendation and that information is 6 published on the web as soon as it's 7 available, it becomes part of the public 8 record and, and forwarded on to the, to the, 9 to the next review committee so that they 10 have that information. And, and the same is 11 true for the RG2, as soon as they finish 12 theirs and, and make their recommendation, a 13 summary of their review and recommendation is 14 prepared, placed on the web and, and 15 forwarded on as part of the package to the 16 RoC subcommittee, as are all the public 17 comments we've received all along this 18 process. I mean, we.. when we put out a 19 Federal Register Notice and, and say we, 20 we're soliciting public comment and, and we 21 ask that you get your comments in in 60 22 days, we put a deadline on there only that 23 we can guarantee, that if you get us 24 information within, by that 60 days, say for 25 example, we can guarantee that we will get</p>
<p style="text-align: center;">Page 74</p> <p>1 Scientific Counselors' recommendations are 2 different and, and, and the reasons why 3 could be getting out of the minutes of the 4 meetings. 5 MS. FELTER: Susan Felter. 6 I have a, a clarifying question. Is it 7 possible to put the slide back up for one 8 second? 9 DR. JAMESON: This one? 10 MS. FELTER: Right. In, on 11 the right hand column it says that these are 12 three independent recommendations, and my 13 question is whether the commentaries that are 14 provided by the RG1, you know, appears to be 15 sequential. If those are written up and 16 appended to the document, are those available 17 to the RG2 before they start their review so 18 that in fact and, and those together then 19 are all available to the Board of 20 Scientific... so, so that is in fact a 21 sequential. 22 DR. JAMESON: Yes, as, as, 23 as we proceed through the process... 24 MS. FELTER: Okay. 25 DR. JAMESON: ...when, when</p>	<p style="text-align: center;">Page 76</p> <p>1 that information in the package to the next 2 review group or to whatever the next step in 3 the review process is. That does not mean 4 that after 60 days we will not accept 5 comments, that is not the case. We will 6 accept comments on, on what we're doing at 7 any time. We're very, very happy to receive 8 comments, but we put a deadline only so that 9 we can guarantee you that if we get it by 10 that time we can include it in the package 11 with the next proc... with the next step in 12 the process. 13 DR. GOLDMAN: Okay, yes. 14 DR. ALLABEN: I'd like to 15 make one comment. Having been involved with 16 the RG2 and the Executive Committee and, and 17 been around long enough to evaluate documents 18 that sort of evolved as they went through 19 the review groups and changed to the 20 Executive Committee and then also seen where 21 they've been stagnant, it's sort of you're 22 damned if you do and you're damned if you 23 don't, but I think that when the document 24 changed over time and then it got to the 25 Executive Committee meeting, often they would</p>

<p style="text-align: center;">Page 77</p> <p>1 look back at RG1 and RG2 and try to  2 determine why they voted in a particular  3 way, and it could be confusing because they  4 wouldn't understand that, that RG1 and RG2  5 didn't have a particular set of information.  6 And if it was just sort of melded into the  7 document it would be less clear. But by  8 having the same document, for example, the  9 Executive Committee can look back and see  10 what document RG1 and RG2 looked like,  11 looked at, then they can also see how  12 additional information was added and impacted  13 the subsequent decisions, and so I think the  14 present format is probably the best at this  15 time.</p> <p>16 DR. GOLDMAN: Okay, well, yes.  17 Chris.</p> <p>18 DR. PORTIER: I just want to  19 reenforce what Mark pointed out, and that's  20 one of my concerns and the Director of  21 NIEHS's concerns as well and now with the  22 process we're trying to put into place here,  23 the Director will be able to sit down,  24 evaluate the evidence, understand hopefully  25 everyone's point of view and how they</p>	<p style="text-align: center;">Page 79</p> <p>1 possible. I'm going to now take the  2 prerogative of the chair, break the order of  3 the speaker's list just a little bit because  4 I know that Dr. Goldstein has a plane to  5 catch and the weather is pretty dicey out  6 there, so Bernie, if you want to come  7 forward and give your, your comments.</p> <p>8 DR. GOLDSTEIN: Thank you,  9 Lynn, I really appreciate that. The, it's  10 particularly important on a day when the  11 planes are down and delayed but you never  12 know. You heard Bill Jameson and the very  13 last point he made about changes talked  14 about working with regulatory agencies to  15 help get the message. I think more has to  16 be done there. What I am particularly  17 concerned about is the fact that as Rafael  18 Moure-Eraso just told us, you've got a  19 public health decision here, there's a, if  20 you're listing something as something that  21 causes cancer you've got to really act on  22 it. At the same token, we've heard, I think  23 very compelling information from industry  24 sources about certain things that get listed,  25 appropriately so in my view, as carcinogens</p>
<p style="text-align: center;">Page 78</p> <p>1 received, how they got to that point of view  2 and make a decision that's informed rather  3 than potentially hidden in some oth...in some  4 way. We're trying to make it as open and as  5 clear to the point of the Director can  6 actually see the evidence in front of him  7 about what the scientific review was like,  8 who said what, why, and make a, hopefully an  9 informed scientific decision from that  10 process. And to comment on the independent  11 review groups obviously, that was your  12 question about the word independent, in this  13 case the word independent simply implies that  14 they're different people on the different  15 groups. They are not necessarily independent  16 since obviously the decision of one is  17 portrayed to the other.</p> <p>18 DR. GOLDMAN: Thank you for  19 that and thank you, thank you, Bill, for  20 that presentation. I think that it's clear  21 that there is a lot of openness to change  22 here, that things have changed and are  23 continuing to change in the approach that  24 has been taken to make sure that people can  25 have as much access to the process as</p>	<p style="text-align: center;">Page 80</p> <p>1 having second order and third order effects.  2 Sometimes the effects are on the industry of  3 welding, sometimes they're on public health  4 as perhaps the Tamoxifen example, there are  5 others. And it seems to me that the  6 criticism is really not appropriate toward  7 the NIEHS who had a hazard identification  8 process. It's really appropriate toward the  9 regulatory agencies themselves. This process,  10 relatively uniquely I'm told, for all the  11 processes worldwide, has the regulatory  12 agency sitting in on at the very beginning  13 and they are there throughout. And there's  14 absolutely no reason that they should not be  15 able to decide in advance what they will do  16 preliminarily at least about the decision. So  17 what I would suggest as a very formal part  18 of the process would be something in which  19 every one of the regulatory agencies would  20 be required to provide, I gave it an  21 abbreviation and a name because after all  22 this is the way we work. I gave it a three  23 letter abbreviation because four letter  24 abbreviations don't work well in Washington  25 in my experience, but basically it's, it's</p>

<p style="text-align: center;">Page 81</p> <p>1 the regulatory agencies who are involved in                  2 the NTP process, they ought to say what they                  3 plan to do about it. And they ought to be                  4 working at an issue as soon as something                  5 gets put on the nomination list. And they                  6 ought to release this all at the RoC listing                  7 or de-listing or in the situation of                  8 something like Tamoxifen we ought to release                  9 it not then which is what happened at that                  10 point, but when the Board, when this thing                  11 gets to be public which is long before it                  12 formally does come out through the Secretary.                  13 And they ought to basically be able to say                  14 what they think is important. And, you                  15 know, I'm not talking about something that's                  16 binding, I'm talking about a non-binding                  17 preliminary intent of an agency to review                  18 data, to gather data, to begin its                  19 regulatory process or say in the case of                  20 Tamoxifen, as the Consumer Product Safety                  21 Commission is saying basically, not part of                  22 our mission. Now a lot of these things can                  23 be looked at from the point of view of an                  24 agency that needs to basically be responsive                  25 including what its time frames are going to</p>	<p style="text-align: center;">Page 83</p> <p>1 to point out that they are I think still in                  2 the process of gathering information about                  3 drugs that get into, that humans use and                  4 it's free to get into the worst kind, what                  5 does that do? So there's a reason for them                  6 to add perhaps Tamoxifen to that list, at                  7 least to look at it. Again, notify the                  8 public as to what they plan to do and when                  9 they should plan to do it, and we're talking                  10 about, I'm talking about something that if                  11 it goes more than one paragraph, it's                  12 probably going too long. We're really just                  13 talking about a short informational package                  14 of what the agency intends to do about this,                  15 and I see no reason that that can't come out                  16 just as part of the, of, of the record at                  17 the same time everything else as we raised.                  18 I, I'd point out to you that a lot of the                  19 comments that are made here, particularly                  20 from folks from industry, really ought to be                  21 made to the regulatory people, they're the                  22 people who are accustomed to responding to                  23 it, they understand the process better,                  24 what's going to come out of it. It's not                  25 the kind of thing that you really, really</p>
<p style="text-align: center;">Page 82</p> <p>1 be. In other words tell the public flat out                  2 what you expect to be, to be done here, it                  3 gives you an opportunity to make a public                  4 health statement if need be. Don't worry                  5 about whatever the compound is, it may have                  6 some benefits or that this is related                  7 specifically to a particular situation. The,                  8 the bias I'm coming from, just so that                  9 everybody knows what the biases are, is I                  10 performed research and development at EPA lo                  11 these many years ago and always in a                  12 regulatory agency there is a problem of                  13 getting the scientific information from the                  14 scientists involved in the agency who are                  15 very often involved in these processes and                  16 the folks who do the regulation. Well,                  17 let's force that issue, let's make sure                  18 there is a rapid response, let's make sure                  19 that every time one of these decisions are                  20 made, the agencies involved that have been                  21 involved from the get go are able to say,                  22 what is it they plan to do about it. Now                  23 the plan, as I say, may be just simply,                  24 simply a matter of saying that they're going                  25 to gather information, could be on Tamoxifen</p>	<p style="text-align: center;">Page 84</p> <p>1 want your, your scientists to be responding                  2 to, you really want your regulators to be                  3 responding to it, and sometimes the important                  4 thing to you is that they respond early. And                  5 again the attempt here is to just simply put                  6 on record to every regulatory agency that's                  7 part of this process from the very                  8 beginning, that they will have to respond                  9 and if they're going to respond it's in the                  10 public benefit, the industries' benefit that                  11 they respond more rapidly rather than slowly.                  12 That's my suggestion.                  13 DR. GOLDMAN: All right. Let                  14 me see if any others have questions or                  15 comments. Yes, Mark.                  16 DR. ALLABEN: NIOSH is not a                  17 regulatory agency but I always think in                  18 terms of how we might answer this question                  19 and how would you think that these agencies                  20 would give you something beside a boiler                  21 plate answer for every listing, in other                  22 words, if we looked at this and knew that                  23 when something was listed as a known or                  24 reasonably anticipated, we would say, in                  25 those particular cases we do this, this is</p>

<p style="text-align: center;">Page 85</p> <p>1 on carcinogens. What would you expect you 2 might get beyond that? 3 DR. GOLDSTEIN: Well, we were 4 saying like Nickel Steel, the industry, 5 basically stainless steel is saying that they 6 are going to be hurt by this issue of people 7 not buying stainless steel because they think 8 that it's a carcinogen, I'm not sure that 9 that's correct but it's just what they 10 report. But I think if, if you really are 11 going to find Nickel as a problem then one 12 of the Nickel Steel issues has to do with 13 people working Nickel Steel, working in 14 stainless steel, grinding it or otherwise and 15 if NIOSH wants to say or OSHA wants to say 16 that in 90 days we're going to gather 17 information as to whether there is exposure 18 during the grinding or other processing of 19 Nickel Steel, you are basically committing 20 yourself to do something within sometime. Now 21 it's a non-binding commitment but it is 22 something which you've probably looked at and 23 you've said, well, gee, they're now saying 24 Nickel is a carcinogen, Nickel Steel, I 25 wonder if there's any exposure to people who</p>	<p style="text-align: center;">Page 87</p> <p>1 they, they thought that through, it probably 2 would be a good thing if they would. I just 3 had a trivial suggestion which is that you 4 would call it an advanced notice instead of 5 a preliminary notice. I, I think in some 6 ways it's a good idea, I'm confused about 7 what the timing should be though, Bernie, I 8 mean, I think it could be, because just at 9 the point of, you know, many things that are 10 nominated and considered then end up not 11 being listed. So, it could create confusion 12 if the agencies were to publish some notice, 13 that then would not come to fruition because 14 it didn't end up being listed, so, but, so 15 that would need to be kind of worked 16 through, but I don't think it's a bad idea. 17 DR. GOLDSTEIN: Maybe the 18 agency should have an idea though like if it 19 is listed as a known we'll do this, if it's 20 not listed we'll do that, I mean it's 21 just... 22 DR. GOLDMAN: Some policies 23 would be great, that's, it's really, that's 24 really a good point, and it does create a 25 lot of uncertainty for the community, the</p>
<p style="text-align: center;">Page 86</p> <p>1 work in this, the people who repair it, 2 people who are tearing down old buildings 3 with Nickel Steel sink, sinks, and so we're 4 going to look at this and we expect in 90 5 days to have that information to understand 6 whether or not it's a major risk. Now that's 7 the kind of thing that I think can be done, 8 should be done. 9 DR. GOLDMAN: That's a 10 brilliant idea actually, that maybe if the 11 agencies came up with boiler plate language 12 for that, then they might actually have some 13 policies that would be clear, that wouldn't 14 be a bad thing. So maybe that would be 15 better, actually, but that has nothing to do 16 with, of course, what the National Toxicology 17 Program would do, but it.. you know, it's 18 not a new idea either, remembering the old 19 OSHA carcinogen policy and what Eulah Bingham 20 did years back, you know, it doesn't hurt to 21 have some idea of what you're going to do if 22 something's listed. I, I don't think that 23 the agencies have that kind of policy, most 24 of them, that, you know, that oh, god, if 25 there's a new listing and it's under my</p>	<p style="text-align: center;">Page 88</p> <p>1 fact that there, there aren't those 2 guidelines that are in place. Any other 3 comments or questions for Dr. Goldstein 4 before he runs to the airport? Yes. 5 MS. LE HURAY: Just two 6 things naturally, this is Ann Le Huray 7 again, one is just to point out it's not 8 NTP's fault that there's a number of 9 regulatory triggers that are just 10 automatically triggered, written into the 11 regulation, one being an OSHA trigger if you 12 have a finding of carcinogenicity and the 13 other being of course the Prop 65 in 14 California trigger because NTP is recognized 15 as an authoritative body, and the, and the 16 second I just would like to say about... 17 that it's not the kind of thing that, I 18 think you're quite right that you don't want 19 to have your scientists necessarily making 20 policy decisions, but the chemical industry 21 being a science based industry, we would 22 like to have our scientists engaged as well 23 and that's, that's part of... you know, some 24 of the root of the frustration at least of, 25 of industry comments about getting engagement</p>

<p style="text-align: center;">Page 89</p> <p>1 because we think we have pretty good  2 scientists and you know, well, we think that  3 they know quite a bit about the materials  4 that are being listed, so one of the  5 frustrations is that our scientists would  6 like to be involved and, and engaged in the  7 process as well, so.  8 DR. GOLDMAN: I'm going to  9 take one last comment here and then move on.  10 DR. CARPENTER: As a  11 scientist who works in an agency that deals  12 heavily in policy, I have some reservations  13 about what you've presented. I think NTP, as  14 I perceive this process is, is that it is a  15 scientific process, that all attempts are  16 made to keep it free from policy until the  17 very end of the process and I think that's  18 actually a good move, again speaking  19 scientifically, because you really don't want  20 policy to drive your science until the  21 appropriate time. And I wonder whether policy  22 implications being taken into account by a  23 group of scientists considering what should  24 be a scientific document, scientific decision  25 is, is a correct move.</p>	<p style="text-align: center;">Page 91</p> <p>1 DR. GOLDMAN: Okay, thank you  2 very much. Next up on the list is Donald  3 Smith from the UVIR Research Institute. My  4 understanding is that he was not going to be  5 able to make it today. Is that correct? And  6 I, I have before me a written version of his  7 testimony which I suppose I could just read  8 it into the record, see if I can, if I can  9 find it, and you'll have to use your  10 imagination and pretend that I'm Donald L.  11 Smith. I'm not even sure I can remember what  12 he looks like. I think we have seen him here  13 before. Good morning, my name is Donald L.  14 Smith and I am the Director of Research at  15 the UVIR Research Institute in Tucson,  16 Arizona, an organization studying the  17 biological effects of ultraviolet visible and  18 infrared electromagnetic radiation. It is my  19 opinion that the primary weakness of the  20 Report on Carcinogens is that it errs  21 fundamentally when (a) it relies upon the  22 outmoded and scientifically unsupportable  23 Linear Non-Threshold Haz..., LNT, hazard  24 assessment method, which assumes that because  25 an agent, substance or mixture, ASM, is</p>
<p style="text-align: center;">Page 90</p> <p>1 DR. GOLDSTEIN: I agree with  2 you completely and I'm sorry if I, if my  3 presentation was too quick to make that  4 point. No, I think that elsewhere within  5 the agency there ought to be people being  6 told by their scientists that this is coming  7 forward to a decision, it could be a known,  8 it could be a reasonably anticipated. We  9 need to prepare what ought to be done, but  10 that's your job, the regulators, to decide  11 what it is that you think we ought to be  12 saying about this if it turns out to be  13 known, about what we plan to do.  14 DR. GOLDMAN: You were not  15 suggesting that the risk assessors would do  16 this?  17 DR. GOLDSTEIN: No, I don't, I  18 don't suggest this to the NTP that the risk  19 assessors do this, what I'm suggesting is  20 that when this gets published each of the  21 agencies that should've known about this from  22 the beginning because they've been sitting at  23 the table basically have their regulators  24 come out and say here's what we intend to  25 do.</p>	<p style="text-align: center;">Page 92</p> <p>1 hazardous at a specific dose, it is  2 hazardous at any other dose, for evaluating  3 potential listings; (b) it fails to mention  4 the beneficial effects of an agent, substance  5 or mixture, ASM, when that ASM has both  6 beneficial and harmful effects and this  7 failure is especially misleading and  8 potentially damaging to the American public  9 when the ASM, like for example, ultraviolet  10 radiation is essential for survival of life  11 on earth. It is wholly irresponsible for any  12 federal scientific body, NTP, and quasi-  13 health agency, NIEHS to omit from a  14 document, the RoC, purporting to assess the  15 harmful effect or effects of an ASM on the  16 human body, a detailed discussion of the  17 beneficial effect or effects of the ASM on  18 the human body when the ASM is known to have  19 both harmful and beneficial effects. Thus if  20 the RoC is to warn the American public  21 accurately about the health implications of  22 an ASM that has both beneficial and harmful  23 effects like ultraviolet radiation, it must  24 be sure not only to warn them about the  25 harmful effects of the ASM, but also to</p>

<p style="text-align: center;">Page 93</p> <p>1 the ASM. To do otherwise renders the RoC  2 incomplete and misleading because it will not  3 equally and fairly present both sides of the  4 risks involved to the American public. And  5 that is the, the end of, of Donald L.  6 Smith's comments, and those will be, have  7 now been read into the record. Why don't we  8 move to the next, the next commentor if  9 that's okay with everyone, who is Timothy  10 French from the Engine Manufacturers  11 Association. Are you here? Okay, not being  12 present, I'm going to move forward. If  13 people arrive late we will fit them in at  14 the end, and so next is William Kelly from  15 the Center for Regulatory Effectiveness,  16 speaker #4.  17 MR. KELLY: Do you want me  18 to come up there or speak from....  19 DR. GOLDMAN: I think it  20 would be probably easier, but if you'd  21 rather speak from back there, it's fine but.  22 Why don't you, why don't you come forward, I  23 think it might be easier for those of us up  24 here certainly to see you.  25 MR. KELLY: So I'm speaking</p>	<p style="text-align: center;">Page 95</p> <p>1 I would call the point of no return farther  2 forward in the process, whereas previously  3 the RG1 was the one to determine the  4 sufficiency of the nomination, we now have a  5 new group before the RG1 making the basic,  6 preparing the nomination background and  7 submitting it to the Director for approval  8 and then the review process begins. In view  9 of this, I feel even more strongly that once  10 a nomination is submitted and is intended to  11 be submitted to the nomination review  12 committee, that is when there should be a  13 public notice and an invitation for public  14 comment to the nomination review committee.  15 And the purpose of this is not to, to argue  16 about whether a listing is appropriate or  17 not, it's just to make sure that the  18 nomination review committee is really, has  19 available all the significant information it  20 needs and this is particularly important with  21 what I would call mixed exposures or non  22 homogeneous exposures. There are a lot of  23 exposures in the areas of worker exposure  24 and things like industrial minerals and  25 metals where you don't have a synthetic</p>
<p style="text-align: center;">Page 94</p> <p>1 to your faces, not to your backs.  2 DR. GOLDMAN: Exactly.  3 MR. KELLY: I'm not sure  4 whose this is, but... We submitted detailed  5 written comments which are available outside,  6 I noticed there are some, there were some  7 formatting problems in posting them  8 electronically, so I have better copies if  9 anybody wants, wants one. Really the only  10 change was made in them was the number of  11 some of the recommendations at the end. And  12 I see that one of our, our major  13 recommendations, I believe has been taken  14 care of now and that was the recommendation  15 to be sure to, to set a definite time for  16 the release of the background document and  17 I'm, I'm very pleased to hear that  18 commitment is being made to release that  19 before the RG...RG1, with a fairly specific  20 time frame before the RG1. We think that the  21 nomination review committee is a, is a very  22 good idea and I guess the, the main  23 remaining recommendation we have centers  24 around that. With the institution of that  25 new committee, it in effect moves the, what</p>	<p style="text-align: center;">Page 96</p> <p>1 chemical that's a very clearly defined  2 substance. In fact, in the case of say an  3 industrial mineral, the, the actual exposure  4 may differ from one mine to another quite  5 dramatically as we, we've seen in some of  6 the reviews. In other cases where you have  7 worker exposure, the types of exposure,  8 different types of facilities may be  9 different, that workers may be exposed to,  10 to co-carcinogens, or different sub....  11 substances, some of them also potential  12 carcinogens along with the substance under  13 review, and the nom... the people on the  14 nomination review committee aren't  15 necessarily going to be aware of those very  16 site specific types of issues or mineral or  17 compound specific issues. And the nomination  18 review committee of course can review the  19 available peer review literature, but as  20 people may have noticed, it, in the issue,  21 with regard to the issues of exposure and  22 how the substance is actually defined, those  23 two parts of the background document are not  24 dependent on peer reviewed literature. The  25 committees are free to consider other sources</p>



<p style="text-align: center;">Page 97</p> <p>1 of information. So I think it would be very  2 valuable to let the public and stakeholders  3 know when a nomination is going to be under  4 consideration and wheth..., when the nom...,  5 it is going to go to the nomination review  6 committee so that they can suggest points  7 that need to be considered, provide  8 information particularly on, on these kinds  9 of issues of what exactly are the physical  10 chemical characteristics of a compound, what  11 the exposures are, not quantitatively so much  12 as qualitatively and how they might differ  13 from, from site to site. And also to  14 recommend at that time people who might be  15 spe..., very knowledgeable on these types of  16 issues and those might be, they're not  17 necessarily published authors, but they might  18 be, for example, health and safe... safety  19 experts at a particular company or even a  20 mine operator who, or a mineralogist who is  21 familiar with that particular type of  22 compound at a particular mine or a  23 particular facility, but has not necessarily  24 published a paper on it. Okay, so that's,  25 that's the next major recommendation that we</p>	<p style="text-align: center;">Page 99</p> <p>1 confidential we have gotten some reports on,  2 on how they're conducted. Those...the  3 Executive Committee does not necessarily get  4 into the details of a particular proposed  5 listing the way the other review committees  6 do. They will look at, you know, what has  7 happened in the review process, did RG1 and  8 RG2 differ from, in their votes from each  9 other, and did they differ from the RoC  10 subcommittee and what are we going to do  11 about that, or what are we going to do about  12 the Tamoxifen issue, but they don't get into  13 the science so much. So the question and I'm  14 not.. we have proposed that they actually be  15 removed from the review process, or as has  16 been suggested today perhaps their role  17 should just be clarified more, but I would  18 suggest, certainly they have a place in the  19 process. I mean they're participating  20 agencies, it's an NTP listing, it's not an  21 NIEHS listing. Dr. Olden is Director of the  22 NTP which means he works with all of these  23 other agencies, he's not the guy who runs  24 these other agencies and that will be true  25 of any subsequent Director also of course.</p>
<p style="text-align: center;">Page 98</p> <p>1 had after releasing the background document  2 before RG1. Of course we've recommended that  3 since this is now an evolving process with  4 there really being not just a background  5 document, but a bet..., what I would call a  6 background document package, as it moves  7 forward through the process, each committee  8 adds comments and recommendations to become  9 part of the package, that information be  10 posted as it, as it develops and before each  11 review committee meeting so that people have  12 a chance to see it and if they, they notice  13 anything that's really off in there they  14 have a chance to comment to the next  15 committee. Now what..., probably the most  16 radical suggestion we made which has been  17 referred here today, not necessarily  18 attributed to us, is, is the role, has to do  19 with the role of the NTP Executive  20 Committee. We actually... we made the point  21 that, that that is often viewed and in fact  22 is more properly characterized as a policy  23 level type of committee rather than a  24 scientific review committee. As I understand  25 it, even though those meetings are</p>	<p style="text-align: center;">Page 100</p> <p>1 So there's a place for it, the Executive  2 Committee, but I think it would be more  3 constructive for the process if instead of  4 having the Executive Committee actually vote  5 on a recommendation, which I think they have  6 mostly in the past, though I have no way of  7 really verifying that, that the better way  8 to do it would be to let each of the  9 agencies as an agency submit comments to the  10 Directors and of course they would go  11 through the head of the agency or whoever  12 was on the NTP Executive Committee before  13 they got to the Director I assume and they'd  14 be signed off on. But then the agency would  15 be freer to have, you know, their best  16 scientists, their most qualified scientists,  17 particularly with regard to a particular  18 proposed listing, take a look at what had  19 been done with that listing and, and submit  20 really scientific comments to the Director  21 and the Secretary. There have been other  22 issues raised today which I think will come  23 up in the discussion, so I'm going to cut it  24 short and not comment on those yet. I  25 may.... well, you can count on me to jump in</p>

<p style="text-align: center;">Page 101</p> <p>1 as they come up in the, during the rest of  2 the discussion. So that's all I have for now  3 other than what's in the written comments we  4 submitted.</p> <p>5 DR. GOLDMAN: Thank you very  6 much for that. Are there questions that  7 people have, or points where you would like  8 to receive clarification? Mark?</p> <p>9 DR. TORAASON: Yeah. Playing  10 a role in the Executive Committee not as a,  11 as a member but as a, sort of a briefer for  12 our Director I would argue that I think that  13 at times the Executive Committee can be more  14 technical than it's being placed here. What,  15 what does not take place at the Executive  16 Committee from my perspective is a rehashing  17 of issues where there's a great deal of  18 agreement. It's only in particular cases  19 where there's a contention over an issue and  20 in these cases the Executive Committee will  21 evaluate it. So I think that their vote is  22 important and they do play an impact and in  23 a sense... I can't speak for all the  24 agencies that are involved... that the  25 Director doesn't go... our Director doesn't</p>	<p style="text-align: center;">Page 103</p> <p>1 the process of nomination that anybody that  2 consider that something should be nominated  3 should be free to present it and then within  4 the NTP, the gathering of information occur  5 and the decision is made if it, it is there  6 something, if there is enough material to do  7 it. But, I, I, I would like to, to, I  8 wonder if you are suggesting that a  9 nomination be made more formal and that the  10 people that nominate present evidence?</p> <p>11 MR. KELLY: My understanding  12 of the process as it's written up right now  13 is that, is that the nomination review  14 committee is free to supplement what was  15 submitted by the.. along with the original  16 nomination. The point I'm making is that I  17 think it's important for the public and  18 stakeholders to know when a nomination has  19 been submitted and when there is going to be  20 work done by the nomination review committee  21 in making a recommendation on the sufficiency  22 of the nomination and gathering further  23 information. And it's the gathering further  24 information part that I was particularly  25 interested in. I..., once they make that</p>
<p style="text-align: center;">Page 102</p> <p>1 go to the Executive Committee meeting without  2 a thorough review of all the material and a  3 brief on that material, so it's just that if  4 there's nothing in contention then it's  5 not...</p> <p>6 DR. GOLDMAN: Yeah.  7 DR. TORAASON: ...brought up  8 and discussed again.</p> <p>9 DR. GOLDMAN: Thanks for that  10 clarification. Are there questions or.....  11 yes, Dr. Moure.</p> <p>12 DR. MOURE-ERASO: On the issue  13 of, of the nomination committee that you  14 were, you were discussing in there. The way  15 I read it you are saying that or imply that  16 the party that nominates a chemical from the  17 NTP to be considered presents evidence or  18 presents the literature of the, of the, of  19 the chemical while you are making the  20 nomination. My understanding, and I wish if  21 that NTP people should comment on this is  22 that, the responsibility of gathering the  23 information for the nomination is the  24 NTP...., I mean they, they have, my  25 understanding is that they have facilitated</p>	<p style="text-align: center;">Page 104</p> <p>1 recommendation and the Director approves it,  2 the process is set in place that you have to  3 go through almost a two year review process  4 and it's a shame to see that happen if the  5 nomination has not been based on complete  6 data or on data which is somehow flawed. So  7 I would argue that it's important for people  8 to know the nomination is about to be  9 considered and to get to the nomination  10 review committee all available information.  11 I think it's especially important and to  12 suggest individual experts that that  13 committee should consult for further  14 information, particularly on issues they  15 regard as especially significant. Does  16 that...</p> <p>17 DR. MOURE-ERASO: Yeah, I  18 understand better what you're saying.  19 SPEAKER: I must be missing  20 something, Bill, how is what you described  21 different than what he is requesting? I  22 mean you, you, you said you are going to  23 solicit comment before the review begins,  24 aren't you?  25 DR. ALLABEN: Yeah, we, we</p>

<p style="text-align: center;">Page 105</p> <p>1 for a nomination begins, but I think what  2 Mr. Kelly is suggesting is before we even  3 identify the nomination, before the  4 nomination committee sees what is being  5 proposed for possible nominations for listing  6 that there be a public notification of what  7 we're even thinking about considering and  8 getting some input on that, is that...</p> <p>9 MR. KELLY: Well, there are  10 really two distinct parts to the process  11 now, that the review process does not begin  12 until the nomination which has been approved  13 for sufficiency goes to RG1, and the public  14 announcement is not made currently until just  15 before the RG1 meeting. What I'm suggesting  16 is that the public announcement process needs  17 to be moved farther back to the point where  18 prior to consideration of the nomination by  19 the nomination review committee so that they  20 are sure that they have all the important  21 information on that substance or exposure.  22 Does that, does that help, Mark?</p> <p>23 DR. GOLDMAN: Chris, did you  24 want to chime in, I think I understand what  25 you're saying, I actually...</p>	<p style="text-align: center;">Page 107</p> <p>1 evidence points in a, in a particular  2 direction or not. I will also point out that  3 in the review process that Bill outlined,  4 once the Director has selected a list of  5 compounds that we can reasonably review in a  6 two year period in the NTP for the Report on  7 Carcinogens, you have the opportunity to  8 comment on those nominated chemicals and  9 clarify the record of the science on those  10 chemicals which we do encourage you to do,  11 and you have the opportunity at that point  12 to suggest experts who we might include in  13 the overall evalu... preparation of the  14 background documents because at that point we  15 have not started the background documents. So  16 there is an opportunity to do effectively  17 the same thing you're asking for after the  18 choice has been made that these are the  19 things we will review.</p> <p>20 MR. KELLY: I would like to  21 see specifically stated in the procedures  22 that before the RG1 review, the invitation  23 for public comment will include the  24 invitation for recommendations on experts who  25 should be included in the preparation of the</p>
<p style="text-align: center;">Page 106</p> <p>1 DR. PORTIER: I, I  2 understand. I understand what you're saying  3 and I want to make a few things clear.  4 Number 1 is that the policy of the National  5 Toxicology Program is that just because a  6 chemical enters the review process does not  7 mean in any way, shape or form it is suspect  8 as a carcinogen; that is not the intent of  9 our process in advance. Obviously we spend  10 time and effort up front looking at what's  11 available to us, we balance a lot of issues  12 in the nom..., in evaluating what the  13 nomination committee gives us in terms of  14 resources we have available to include in  15 our overall review and a number of things.  16 And so it's not simply a science issue per  17 se up front. But I do want to make it  18 clear, you're presuming in some sense we're  19 reviewing this in the nomination committee  20 with the intent of deciding whether it has  21 enough evidence to actually make the listing,  22 that's not the intent. The intent of the  23 nomination committee is to decide whether or  24 not there is enough evidence to review, not  25 enough.. not the question of whether that</p>	<p style="text-align: center;">Page 108</p> <p>1 background document. I believe that's not  2 stated explicitly in the procedures right  3 now. And I understand your point of view, I  4 am sticking with my point of view that it,  5 it would be valuable for the nomination  6 review committee to, to have a chance to  7 review all the best available information  8 before they make a decision on whether to go  9 forward with the nomination, and as I said I  10 understand your point of view also, that  11 that's not a, it's not a review decision, so  12 there we leave it, it's a suggestion.</p> <p>13 DR. GOLDMAN: I have a  14 question for you. You suggested in your, in  15 your statement that it would be good to  16 expand the core of knowledgeable experts to  17 include people who are not scientists and  18 don't have any scientific information to  19 contribute about the carcinogenicity of the  20 chemicals like mine operators and you listed  21 some others and... I was very surprised at  22 that suggestion and, and I wanted to  23 understand what it is that you felt that  24 those folks could contribute to this kind of  25 process in terms of trying to sort through</p>

<p style="text-align: center;">Page 109</p> <p>1 evidence about carcinogenicity?  2 MR. KELLY: Well, I'm not  3 sure I meant to suggest they weren't  4 scientists. I mean some of them might be,  5 might be...  6 DR. GOLDMAN: You said they  7 might not have published...  8 MR. KELLY: ...be a min..., be  9 a mineralogist, for example.  10 DR. GOLDMAN: Uh-huh.  11 (Indicating affirmatively.)  12 MR. KELLY: I don't know  13 whether you'd consider that a scientist or  14 not, but say somebody who runs a mine and  15 analyzes samples from the mine or whatever  16 would be in a position to say what are the  17 actual exposures at that particular mine and  18 the same would be true for say a production  19 facility...  20 DR. GOLDMAN: Is what you're  21 getting at...  22 MR. KELLY: Those are the  23 technical, technical people but not  24 necessarily scientists in the sense of being  25 toxicologists or epidemiologists or</p>	<p style="text-align: center;">Page 111</p> <p>1 DR. GOLDMAN: The question of  2 what is Vermiculite.  3 MR. KELLY: What is  4 Vermiculite, does it have asbestos in it or  5 not and you're going to need people to  6 present technical information from the Libby  7 facilities itself, you know, presumably there  8 is exposure information that has not  9 necessarily been gathered by toxicologists or  10 epidemiologists or pathologists or, or  11 other...  12 DR. GOLDMAN: Okay, that helps  13 me understand.  14 MR. KELLY: ...health sci...,  15 health scientists...  16 DR. GOLDMAN: That helps me  17 understand what you meant.  18 MR. KELLY: ...that will  19 help, help understand what exactly is the  20 substance to which these people are exposed.  21 DR. GOLDMAN: Thank you very  22 much. Okay, well, I've let us go past our  23 time for the break and.....Oh, one more  24 comment, sorry.  25 DR. DELZELL: I believe you</p>
<p style="text-align: center;">Page 110</p> <p>1 pathologists.  2 DR. GOLDMAN: So is what  3 you're getting at is just physically what or  4 chemically what's the actual identity of the  5 agent? Is that the issue you're trying to  6 get at, is there a scientific issue in there  7 about, you know, mineralogy or chemistry of  8 the agent?  9 MR. KELLY: Yes, we're  10 talking, we're talking...  11 DR. GOLDMAN: Is that what...  12 MR. KELLY: ...about the  13 properties...  14 DR. GOLDMAN: 'Cause I just  15 didn't...  16 MR. KELLY: ...properties of  17 the exposure, whether it's a single exposure,  18 whether it's a mixed exposure, what exactly  19 it, it looks like. Some, particularly  20 industrial minerals exist in a, quite a  21 variety of forms depending on the particular  22 mineral deposit. Some of you may be familiar  23 with the, the whole controversy having to do  24 with, I forget the, the Vermiculite  25 controversy and whether...</p>	<p style="text-align: center;">Page 112</p> <p>1 mentioned that the, the language of the  2 solicitation for public comments that's made  3 after the nomination is, is not clear. Can  4 you be more specific about that?  5 MR. KELLY: You might be  6 referring to the comment I almost directed  7 directly to Chris that the, the currently  8 the solici.. solicitations for public comment  9 do not ask the public to suggest compound  10 specific experts who could contribute to  11 preparation of the background document and I  12 suggested that that be specifically included  13 in the notices and in the procedures. Is  14 that what you're referring to?  15 DR. DELZELL: Yes.  16 MR. KELLY: Did, am I clear  17 about that?  18 DR. DELZELL: Yes.  19 MR. KELLY: Okay. Dr.  20 Toraason, I got the feeling I did not  21 satisfy...  22 DR. TORAASON: No, I  23 understand it now. As we went around and  24 around there, we talked about it.  25 DR. GOLDMAN: He understands.</p>

<p style="text-align: center;">Page 113</p> <p>1 DR. TORAASON: Yeah, I 2 understand. 3 DR. GOLDMAN: Understand 4 the...yeah, that's important, thank you so 5 much. Okay, as I said before, I was starting 6 to say we did go right through the break and 7 what I want to propose is that we would 8 continue in this manner until noon and break 9 at noon, for a brief lunch. Is that okay or 10 do we need to adhere to the 12:15 break 11 time? Mary, just pipe up if...it's, that's 12 okay, is that okay with people in the 13 audience that instead of at 12:15 we would 14 take our lunch break at 12, so that I'm, I'm 15 basically cutting out the little morning 16 break, but trusting that you can come in and 17 out. So why don't we go ahead and keep 18 moving on? Is James McGraw here? 19 MS. LE HURAY: No. 20 DR. GOLDMAN: No, I'd 21 heard...yeah, I thought he wasn't going to 22 be able to make it, but we do have a letter 23 from him and I.. and Richard Becker I take 24 it is still digging... 25 MS. LE HURAY: Through the</p>	<p style="text-align: center;">Page 115</p> <p>1 let's go ahead then and... 2 DR. PORTIER: Clearly we can 3 wait 'til after lunch for your presentation 4 and you can contact him and... 5 DR. GOLDMAN: And... 6 DR. PORTIER: ...discuss the 7 issue... 8 DR. GOLDMAN: Also I have a 9 re... 10 DR. PORTIER: ...we can decide 11 after lunch. 12 DR. GOLDMAN: I also have a 13 request from one of the later speakers to go 14 before lunch, if... is that.. would that be 15 okay for you to stay through lunch and... 16 MS. LE HURAY: Sure, that'd 17 be fine. 18 DR. GOLDMAN: ...do it after 19 lunch? Is that all right? Okay, why don't, 20 why don't we go ahead then? Jennifer Sass 21 had requested to try to go before lunch 22 because of a scheduling conflict. So we will 23 then accommodate that and.... I'd like to 24 see Rick here so let's call him. 25 MS. SASS: Is it okay if I</p>
<p style="text-align: center;">Page 114</p> <p>1 me his slides. 2 DR. GOLDMAN: Or is he going 3 to continue to try to soldier on and get 4 here, they might dig him out if he wants to 5 go later. I could move on to the next 6 speaker. 7 MS. LE HURAY: I, I could 8 either give his presentation, or if you're 9 going to continue tomorrow, he doesn't think 10 he'll be able to get out today. 11 DR. GOLDMAN: We may be 12 concluding today, so it could be that the 13 best thing then would be to go ahead and let 14 you keep your place in line here and, but 15 they may be plowing the area out. If, if... 16 MS. LE HURAY: Well, I know 17 there was some areas, and I'm not sure where 18 Rick lives, but for example they closed 19 Georgetown Pike this morning because of ice. 20 DR. GOLDMAN: Yeah. 21 MS. LE HURAY: So if he 22 lived out that way it's more, more than a 23 plowing problem, it's ice on the road, so... 24 DR. GOLDMAN: Okay. I know. 25 I drove here, I know about the ice, okay,</p>	<p style="text-align: center;">Page 116</p> <p>1 give my comments from here? 2 DR. GOLDMAN: I think it may 3 be difficult, if you, if you do need to 4 speak from back there, there is a mic on the 5 pole, you could use that mic I think or sit 6 down at your chair, but then we won't be 7 able to see you, so it would be better if 8 you're speaking into a mic and we are 9 recording so we want to make sure that... 10 MS. SASS: Is this on? I'm 11 Jennifer Sass with the Natural Resources 12 Defense Council. These are short comments and 13 I've also handed a few copies in some 14 written comments... some written copies. I 15 have only two points and I, I don't think 16 they're, they're actually very radical at 17 all, so I'm sure that when you hear them 18 you'll really be excited about making these 19 minor changes. I'm also volunteering, I, I 20 train guide dogs, this one's in training, so 21 I hope she doesn't get out of hand. The 22 first is the criteria I think need an 23 explicit description of how mechanistic data 24 can be used to upgrade an agent. The NTP 25 criteria for listing agents in the Report on</p>

<p style="text-align: center;">Page 117</p> <p>1 Carcinogens as quote, known to be human                  2 carcinogen, unquote, requires sufficient                  3 evidence of carcinogenicity from studies in                  4 humans, which indicate a causal relationship                  5 between exposure to the agent, substance or                  6 mixture and human cancer, that's the criteria                  7 as it's listed. The criteria also allow for                  8 conclusions of carcinogenicity to be based on                  9 scientific judgment with consideration of all                  10 relevant information, this is also written.                  11 This relevant information may include                  12 mechanism of action information. The                  13 criteria, the criteria describe how                  14 mechanistic data may be used to de-list or                  15 downgrade an agent that causes cancer in                  16 animals. The criteria state, quote, for                  17 example, there may be a substance for which                  18 there's evidence of carcinogenicity in                  19 laboratory animals, but there are compelling                  20 data indicating that the agent acts through                  21 mechanisms which do not operate in humans                  22 and would therefore not reasonably be                  23 anticipated to cause cancer in humans, that's                  24 the language of the example that's given.                  25 However, it is an obvious, obvious absence</p>	<p style="text-align: center;">Page 119</p> <p>1 clarification should be part of the criteria                  2 as opposed to listed below and even this                  3 clarification though, we don't think is                  4 sufficient, for example Vinyl Chloride is a                  5 known human carcinogen, but Vinyl Bromide and                  6 Vinyl Fluoride also produce tumors in                  7 experimental animals and the same types of                  8 DNA adducts in exposed animals and the same                  9 metabolites by rodent and human liver                  10 microsomes. All of this information                  11 indicates that these Vinyl halides act by a                  12 common mechanism and should be regarded as                  13 human carcinogens. I think that the NTP                  14 does take this kind of thing into account, I                  15 just think that this spe..., the language                  16 should be explicit and it should be included                  17 in the criteria. It would be misleading for                  18 a worker to believe that his or her cancer                  19 risk is reduced when working with Vinyl                  20 Bromide for instance versus Vinyl Chloride.                  21 The NTP RoC needs to maximize the                  22 appropriate use of this mechanistic data to                  23 properly inform the public of cancer hazards                  24 that they may encounter in environments and                  25 work places by including specific and</p>
<p style="text-align: center;">Page 118</p> <p>1 that the criteria lack an explicit                  2 description of how mechanistic data can be                  3 used to upgrade an agent. Especially to the                  4 known human carcinogen category. So, we think                  5 that it's essential to have explicit criteria                  6 laid out that would allow the use of                  7 mechanistic data to list or upgrade an agent                  8 to known human carcinogen where it's                  9 appropriate. I know that the NTP considers                  10 this, but I think it should be part of the                  11 language and not just a, a negative example.                  12 My second point is that the NTP Report on                  13 Carcinogen needs to maximize the appropriate                  14 use of mechanistic data to properly inform                  15 the public of cancer hazards that they may                  16 encounter in the environment or the                  17 workplace. After presenting the criteria, the                  18 report provides a definition of human studies                  19 as traditional cancer epidemiology, data from                  20 clinical studies and/or data derived from the                  21 study of tissues of humans exposed to the                  22 substance in questions and useful for                  23 evaluating whether a relevant cancer                  24 mechanism is operating in hum.... in people,                  25 that's the language that's used. This</p>	<p style="text-align: center;">Page 120</p> <p>1 explicit language in the criteria, thank you.                  2 DR. GOLDMAN: Any questions                  3 for Dr. Sass? Comments?                  4 DR. MOURE-ERASO: I                  5 appreciate your comments Dr. Sass, I think                  6 it's a, it's a topic very near to my heart                  7 because I was involved in these decisions                  8 and, and I would like simply to add that,                  9 that the first part of your, of your                  10 comments that, that you say, that an example                  11 is, is, is put on the current comments on                  12 the criteria that of how mechanisms of                  13 actions could be used to change a nomination                  14 or, or a, or a decision of being a known                  15 human carcinogen to being a reasonably                  16 expected to be a human carcinogen. Actually                  17 the, the, the cases of Vinyl Chloride, Vinyl                  18 Bromide and Vinyl Fluoride is probably the                  19 counter example that is the opposite in                  20 which mechanism data was considered in the                  21 discussions of the bureau of scientific, of                  22 the, of the Board of Scientific Counselors                  23 to, to change the nomination for reasonably                  24 expected to be a carcinogen to a known                  25 carcinogen, and actually the decision of the</p>

<p style="text-align: center;">Page 121</p> <p>1 Board of Scientific Counselors was  2 specifically that based on the similarities  3 of action between Vinyl Chloride and Vinyl  4 Bromide and Vinyl Fluoride; so there is a  5 particular example of what you are saying in  6 the first paragraph.  7 MS. SASS: Right, thank you.  8 Yeah, that, that is true of course and what  9 I'm hoping is that tho..., that kind of  10 language and some language that captures  11 those kinds of uses can be put into the  12 criteria more explicitly.  13 DR. GOLDMAN: Okay, don't  14 everybody stampede toward the door, but I've  15 had another request for somebody to be moved  16 up in the order and which we're going to go  17 ahead and accommodate, another flight that  18 somebody has to catch, and so speaker number  19 8, Dr. Roth.  20 DR. ROTH: Thank you for  21 accommodating me, I, I don't know if the  22 flight's going to take off after hearing  23 that Old Georgetown Road was closed, but...  24 I have been involved with beryllium for over  25 25 years as a U.S. government agency</p>	<p style="text-align: center;">Page 123</p> <p>1 comments, (4) They did not give the public  2 sufficient time to address the Board of  3 Scientific Counselors, (5) And they did not  4 permit dialogue or questions and answers  5 between the public and the Board of  6 Scientific Counselors, and finally they did  7 not provide a response to comments that were  8 submitted and some of these were pretty  9 technical comments that would have made a  10 substantial difference in the Board's  11 decision about the carcinogenicity of  12 beryllium. To give you some specifics about  13 the process, the public was not given an  14 adequate opportunity to present their  15 comments to the NTP. One deficiency was the  16 scheduling of nine chemicals to be reviewed  17 by the Board of Scientific Counselors during  18 a two day period. During public comments on  19 the beryllium nomination, members remarked at  20 several points as to the need to conclude  21 consideration of beryllium and move on to  22 the remaining chemicals because of the press  23 of time. Another deficiency was the  24 limitations on the interaction between public  25 commentors and the Board of Scientific</p>
<p style="text-align: center;">Page 122</p> <p>1 official reviewing the beryllium epidemiology  2 data, as it was at the time. As a  3 researcher I've published quite a lot on the  4 epidemiology of beryllium. I was a  5 commentator to a number of different panels  6 and committees such as this for OSHA, EPA,  7 NIOSH and then I served on numerous panels,  8 agency panels to deal with beryllium. My  9 full comments on the beryllium hearings, the  10 NTP beryllium hearings are, was submitted to  11 you and they're available outside as well. I  12 would just like to summarize some of these  13 comments here in about five or ten minutes.  14 The comments are divided into two portions,  15 the first of which is the process, and the  16 second I'd like to give you a little bit of  17 the technical substance. The major problems  18 that we've had with the process section of  19 the beryllium hearings with NTP are (1) NTP  20 did not prepare an adequate background  21 document, (2) They did not provide the  22 public time to review the background  23 document, (3) They did not give the Board of  24 Scientific Counselors sufficient time to  25 review the background document and the public</p>	<p style="text-align: center;">Page 124</p> <p>1 Counselors in discussing the adequacy of the  2 two key studies. Indeed at various points  3 some members of the Board of Scientific  4 Counselors agonized as to whether they should  5 even be discussing the comments from the  6 public or answering questions as opposed to  7 merely listening, listing the comments. Next  8 the composition of the Board of Scientific  9 Counselors was another deficiency; only seven  10 of the twelve Board members were present for  11 the deliberation, five of the members did  12 not hear the public comments including some  13 principal reviewers. In fact, the key with  14 beryllium epidemiology is the epidemiology  15 and there was only one epidemiologist present  16 at the time. Another deficiency was selecting  17 as one of the three primary reviewers a  18 member who had co-authored at least two  19 papers and was apparently working on a third  20 paper with Dr. Ward. That was one of the  21 key epidemiologists. This person's work was  22 at the crux of the board's decision to  23 support a cancer classification change for  24 beryllium. Persons should not be chosen as  25 primary reviewers on proposed nomination for</p>

<p style="text-align: center;">Page 125</p> <p>1 a change in cancer classification if they  2 have been professionally close or personally  3 linked to an author of the primary studies  4 used to support the change. Those summarize  5 some of the problems with the process. NTP's  6 criteria for listing states: conclusions  7 regarding carcinogenicity in humans or  8 experimental animals are based on scientific  9 judgment with consideration given to all  10 relevant information. In several respects,  11 relevant information concerning beryllium was  12 excluded from consideration by NTP. And there  13 were two instances of this. One was a Ph.D.  14 thesis whose document was available online  15 and they refused to consider it because it  16 was just a Ph.D. thesis and another of which  17 was a paper that I had published with Levy  18 and Roth. The, an early draft of the paper  19 was submitted to the committee, they refused  20 to look at it because it wasn't yet peer  21 reviewed, but it was peer reviewed and  22 published two months before the background  23 document came out. So that data were  24 available. And the data in the paper were  25 key because they addressed just the issues</p>	<p style="text-align: center;">Page 127</p> <p>1 States. Of these, five showed no statistical  2 association between lung cancer and, and  3 exposure to beryllium whatsoever, none  4 whatsoever. In fact some of these five  5 studies had a negative association, that is  6 to say for the beryllium workers the levels  7 of lung cancer were lower than the  8 population in general, the U.S. population in  9 general and far lower than the relevant city  10 rates; in other words it was just the  11 opposite way. There were only two plants  12 that showed any association and the relative  13 risks for these plants were extremely low,  14 they were like 1.2, 1.3. Adjusting for  15 smoking even in the papers upon which the  16 Board of Governors relied upon, which showed  17 that one of these plants, all the  18 association was associated with smoking, it  19 had nothing to do with beryllium exposures.  20 So six out of the seven plants showed  21 nothing. The last plant adjusting for city  22 rates instead of the U.S. rates also showed  23 that there was no association. If you looked  24 at all the data collectively, that is to say  25 from all seven plants instead of cherry</p>
<p style="text-align: center;">Page 126</p> <p>1 that were raised at the meeting, and the key  2 issues was, smoking was one of them and our  3 paper had shown that adjusting for smoking  4 alone would have changed all the  5 statistically significant associations with  6 beryllium and lung cancer would have been  7 attributed to smoking alone, so smoking was  8 a critical issue. Another critical issue in  9 the paper was whether or not to compare the  10 lung cancer rates of beryllium workers  11 compared to the U.S. as a whole or to  12 compare it for the relevant rates to the  13 city in which the plants were located and in  14 which most of the beryllium workers worked.  15 Adjusting for city rates instead of using  16 national rates, which include rural areas  17 where lung cancer rates are much lower,  18 would have also changed the association from  19 beryllium and lung cancer from being positive  20 to being negative, no association whatsoever.  21 To put the, all the beryllium data into  22 perspective is that all these papers, ours  23 as well as all the others, looked at seven  24 beryllium plants in the United States, the,  25 all the production facilities in the United</p>	<p style="text-align: center;">Page 128</p> <p>1 picking plants that would have also shown no  2 association whatsoever. Despite this,  3 beryllium's designation was changed from  4 being a probable risk association with lung  5 cancer to almost a certainty. I believe that  6 this experience reveals that NTP's processes  7 are severely deficient as are its criteria  8 as applied in practice. NTP should revise  9 its process and its practices in applying  10 its criteria. Reconsideration of beryllium  11 and beryllium compounds will be a good place  12 for NTP to start in applying improved  13 processes and procedures. Now the  14 documentation for everything that I've told  15 you was contained in the footnotes to my, to  16 my comments, so if you have any detailed  17 questions you could refer to those. Those  18 are my comments.  19 DR. GOLDMAN: Thank you very  20 much. Questions? Yes.  21 DR. ALLABEN: Looking at, at  22 your written comments, would you say that  23 you have several problems with the review  24 process, they're all specific toward  25 beryllium. Would you say that these were</p>



<p style="text-align: center;">Page 129</p> <p>1 endemic to the entire process, or that 2 beryllium just got a short shrift here? 3 DR. ROTH: I would, well, 4 the fact that there were... I, I only 5 attended the beryllium hearings, okay, so I 6 couldn't tell you about the others. But I 7 saw with the short time period they were 8 covering nine pollutants in a very short 9 period of time, and for the other chemicals 10 I know that there weren't any, there, there 11 was maybe one epidemiologist and I'm sure 12 that with the other chemicals epidemiology 13 was also of concern, so even though I didn't 14 attend the other sessions I would assume 15 that it was also endemic to the other 16 chemicals as well. 17 DR. GOLDMAN: Can I just ask 18 a question just for clarification? I'm 19 thinking back, I'm trying to remember, which 20 Report on Carcinogens contained this listing 21 change? 22 DR. ROTH: Is it the 10th 23 report? 24 DR. GOLDMAN: It was in the 25 10th,so it was the last...</p>	<p style="text-align: center;">Page 131</p> <p>1 trying to get back to that and, and... 2 DR. ROTH: Right. 3 DR. GOLDMAN: ...what, in the 4 bigger picture just looking back from that, 5 your experience obviously with the compound, 6 but what you've learned from that and what 7 you would like to communicate to us about 8 what you think needs to change. 9 DR. ROTH: Right, I have a 10 great deal of difficulty just in doing my 11 job and working with the technical portion 12 of things, process is generally way beyond 13 me, but it seems to me that there are things 14 that you could do, number 1, if you don't 15 have an adequate number of epidemiologists on 16 staff, which is, and the issue is 17 epidemiology, then you shouldn't approve 18 anything until you know you have an adequate 19 number of epidemiologists on staff, and the 20 other things are pretty well laid out. For 21 example, there maybe should be very, there 22 should be specifics up until what point do 23 you accept published papers, like here our 24 paper was published in the peer reviewed 25 scientific literature two months in advance</p>
<p style="text-align: center;">Page 130</p> <p>1 DR. ROTH: Right. 2 DR. GOLDMAN: ... the last one 3 and as...and I know that you commented the 4 last meeting so you've obviously observed 5 some of the changes that have occurred in 6 the process and I was wondering compared to 7 then and versus now where you see the 8 changes having been made and more broadly 9 what you think are the most important areas 10 that need to be addressed. Because, I mean 11 some of these things like bringing in more 12 experts, they have made that as a change, I 13 think there probably would be more 14 epidemiologists today and so forth, but maybe 15 some of these there haven't and... 16 DR. ROTH: Right. Well, 17 again, are you talking about process or are 18 you... 19 DR. GOLDMAN: The process, 20 yes... 21 DR. ROTH: Okay. 22 DR. GOLDMAN: ...in terms of 23 the subject matter of our meeting... 24 DR. ROTH: Right. 25 DR. GOLDMAN: ... today, I'm</p>	<p style="text-align: center;">Page 132</p> <p>1 before the document came out and it seems to 2 me that you should try to take advantage of 3 all this latest information. And you know, 4 the other things that I addressed I think 5 it's fairly obvious what the next step 6 should be, you know, if, there should be an 7 opportunity for commenters to hear the 8 criticisms of their work, or you know, where 9 it's accepted and not accepted. So the 10 process should make sense. 11 DR. GOLDMAN: And your paper, 12 is that the Levy and Roth 2002, is that the 13 one... 14 DR. ROTH: Right... 15 DR. GOLDMAN: ...that you're 16 referring to? 17 DR. ROTH: ...right, and it's 18 published in Inhalation Toxicology. 19 DR. GOLDMAN: In Inhalation 20 Toxicology. Okay, thanks. Any other questions 21 or comments before we... oh wait.. go 22 ahead....you first and then. 23 DR. MOURE-ERASO: I would 24 like to first make the comment that I, I, I 25 am amazed of the lengths that you have gone</p>

<p style="text-align: center;">Page 133</p> <p>1 to continue trying to save the good name of  2 beryllium through the years. I have been  3 following your presentations and it seems  4 that has been a tremendous effort that has  5 been put. One question that I have on the  6 specifics that you recommend is you, you are  7 saying that if a reviewer on the Board of  8 Scientific Counselors has been involved in  9 producing a scientific study that somehow  10 relate to the issue that that person  11 shouldn't be allowed to, to be a reviewer?  12 DR. ROTH: That, that  13 individual was pretty much an advocate that  14 beryllium is a carcinogen, you know, he had  15 an axe to grind before he came and they  16 didn't even pay attention to our paper  17 whatsoever.  18 DR. MOURE-ERASO: Yeah. I, I  19 disagree with you very, very strongly. I  20 don't, I think that we aren't talking about  21 having axes to grind, probably there would  22 be other persons here that have axes to  23 grind, I, I, I disagree with your  24 characterization of the person that you  25 pointed out here.</p>	<p style="text-align: center;">Page 135</p> <p>1 think that is not useful.... if you can make  2 some recommendations specifically some  3 procedures that would be helpful...  4 DR. ROTH: Right.  5 DR. MOURE-ERASO: ...but you  6 know, I don't think...I don't think that you  7 are going to have a second bite at the  8 apple...  9 DR. ROTH: Right.  10 DR. MOURE-ERASO: ...to try to  11 declassify beryllium...  12 DR. ROTH: Right.  13 DR. MOURE-ERASO: ... in this  14 forum.  15 DR. ROTH: Right, well, I  16 think at a minimum, at a minimum they should  17 be reading and paying attention to and  18 giving credibility to the published papers in  19 the open scientific literature.  20 DR. GOLDMAN: Point well  21 taken, and, and I think your point about  22 mak...you know, having a clear idea of a cut  23 off for when papers will not, can no longer  24 be brought into the process is an excellent  25 point obviously, logically.</p>
<p style="text-align: center;">Page 134</p> <p>1 DR. ROTH: Right. At a  2 minimum the individual should have looked at  3 the latest scientific research which was a  4 published paper and not only was it just a  5 general scientific paper, but the issues that  6 were discussed at the meeting was whether or  7 not there were other confounders that could  8 have explained the elevated levels of  9 beryllium lung cancer. And the issues were  10 smoking, whether or not...what rate should be  11 used as a referent population and whether or  12 not all seven plants should be considered as  13 opposed to one or two plants, these were...  14 DR. MOURE-ERASO: Yeah, I, I  15 heard, I heard...  16 DR. ROTH: These were the  17 precise...so the paper was extremely  18 relevant, it addressed...  19 DR. MOURE ERASO: But you  20 know, the objective of, of our exercise here  21 is to discuss how could, how could we  22 improve the process, I don't think that we  23 want to re-litigate all the aspects that you  24 have repeated over and over in every forum  25 or the beryllium industry has, I think... I</p>	<p style="text-align: center;">Page 136</p> <p>1 DR. ROTH: Mm-hmm.  2 (Indicating affirmatively.)  3 DR. GOLDMAN: Every day  4 there's a new paper and you have to have  5 some way to stop the flow in so that you  6 can analyze what's there and that just needs  7 to be clear. I thought that was a good  8 point. Let's now move on. Amy, I'm...we  9 have to...you know, we only...oh, Bill had  10 his hand up, I'm so sorry, Bill, it's hard,  11 my eyes in the back of my head are covered  12 by my hair.  13 MR. KELLY: I'm sorry, I'll  14 try to be very brief. This again goes back  15 to the issue of making sure that the  16 nomination is correctly described from the  17 outset. What, it, perhaps my recollection is  18 faulty, but wasn't there with beryllium an  19 issue of worker exposure coincidentally to  20 Sulfuric Acid mist and did not, did that  21 have a bearing on the carcinogenicity issue?  22 DR. ROTH: Right, that, that  23 was another issue that I didn't raise but  24 the one plant that had the highest levels,  25 relative risk of about 1.4 the.. that used</p>

<p style="text-align: center;">Page 137</p> <p>1 Sulfuric Acid and it was listed the, there  2 are individuals that thought that that could  3 be the association, that could be the, the  4 confounding factor, that could be another  5 confounding factor, so you're right, Sulfuric  6 Acid was another issue.  7 DR. GOLDMAN: But that sounds  8 to me like an issue for the epidemiology  9 review in terms of if there's confounding...  10 DR. ROTH: You're right.  11 DR. GOLDMAN: ...and not in,  12 and not so much an issue of the nomination  13 to me but...  14 DR. ROTH: Right, but it's,  15 it's a technical issue.  16 DR. GOLDMAN: It's a  17 technical issue. Why don't we go ahead now,  18 I'm seeing here the numbers of speakers that  19 are left are dwindling down and we've got  20 two more on the list. Are there others that  21 I'm not aware of who are here to speak  22 because when I just again kind of, it's noon  23 and I said we'd break for lunch now, but I'm  24 tempted to say we could move forward with  25 the last two presentations and then break</p>	<p style="text-align: center;">Page 139</p> <p>1 I want to make sure that....  2 DR. GOLDMAN: Because I'm  3 afraid that we will lose our audience.  4 DR. PORTIER: I, I want to  5 make sure we, it's clear we have plenty of  6 time, we'd like to come back after lunch in  7 case there are people who show up. I, I  8 don't want to rush this at all.  9 DR. GOLDMAN: Do you want to  10 go ahead and give your comments now and then  11 perhaps we can have both comments before  12 lunch, take our break, come back and make  13 sure that we've discussed and summarized.  14 DR. PORTIER: And I would  15 appreciate a five minute break right now,  16 yes.  17 DR. GOLDMAN: Well, Chris, if  18 we're going to take a break now since it's  19 noon why don't we just break for lunch then?  20 I mean, it's... that's my sense, is that  21 okay? Yeah, why don't we just take a lunch  22 break and what time do you want to come  23 back?  24 SPEAKER: You're the Chair.  25 DR. GOLDMAN: Say at, how</p>
<p style="text-align: center;">Page 138</p> <p>1 for the day. Now if people would find that  2 to be an appealing alternative, I don't  3 think that the lunch options around here are  4 necessarily the greatest, but I want to  5 check in also with our last two presenters  6 and, and if any of you were counting on the  7 lunch as well for some reason, you don't  8 have to say what it was... Amy, what, what's  9 your pleasure?  10 SPEAKER: I think we should  11 go ahead and...  12 DR. GOLDMAN: Go ahead?  13 SPEAKER: Yes.  14 DR. GOLDMAN : Let's forge  15 forward then and let Ann, you want to, you  16 want to have a...let's give people a 10  17 minute break, 10, 15 minute break. Chris?  18 DR. PORTIER: I would feel a  19 lot more comfortable if we came back after  20 lunch and just summed up and continued. I  21 don't want to feel like we are rushing  22 through these public comments. There is no  23 reason for rush, we can do your comments  24 before lunch. There's good reasons to do  25 them before lunch 'cause many may not come</p>	<p style="text-align: center;">Page 140</p> <p>1 long does it take to get lunch here?  2 DR. WOLFE: The, the lunch  3 options are basically to go across the  4 street to the Natcher building, there are  5 just, there's very limited food downstairs  6 because they're renovating the cafeteria. But  7 right across the street in the Natcher they  8 have like a full surface cafeteria with  9 sandwiches and salad and some hot things, so  10 it's just right across the street.  11 DR. GOLDMAN: So why don't we  12 say that we'll be back here by say 1  13 o'clock? That's a bit of a walk, and people  14 have to bundle up to go back and forth so I  15 apologize to you, Ann.  16 MS. LE HURAY: If I could  17 just do one thing before lunch, I'd like to  18 answer Dr. Toraason's question that you asked  19 about the, Dr. Roth about beryllium, because  20 if we look at NTP's comments in 1999 at a  21 similar meeting I think we had something  22 like 9 or 10 one pages from different  23 chemicals or substance groups describing  24 their experience with the, with the  25 process... the Report on Carcinogens process.</p>

<p style="text-align: center;">Page 141</p> <p>1 And then of course we had Dr. Roth on  2 beryllium and then Dr. Piccirillo will be  3 giving an example from the 11th Report on  4 Carcinogens, you know, to answer any issues  5 you, people had, and that kind of, Dr. Roth  6 doesn't have an overview of all the  7 different people that had been involved. Thank  8 you.  9 (WHEREUPON, a lunch recess was taken.)  10 DR. GOLDMAN: Okay, I can't  11 think of anything I really wanted to do.  12 All right, we have a couple more  13 presentations from members of the public and  14 starting with the American Chemistry Council.  15 This time I will, I'll actually let you go.  16 MS. LE HURAY: Sorry?  17 DR. GOLDMAN: This time I'll  18 actually let you go.  19 MS. LE HURAY: All right, so  20 everybody has to pretend that I'm Rick  21 Becker, and like I said, through the miracle  22 of modern technology Rick was able to e-mail  23 me his slides. We also have written comments  24 that are also not here today, but I've been  25 assured by NTP that they will be made part</p>	<p style="text-align: center;">Page 143</p> <p>1 about listing, listing, listing, but of  2 course if you look at NTP's website it's  3 always listing/de-listing and there have been  4 several cases of substances that have been  5 de-listed and I think that the processes  6 that are thought of should include talks  7 about how do we de-list when it's  8 appropriate. So I apologize for having to  9 pull these apart. On scientific quality just  10 to, to look at the...by the way, copies of  11 these slides are available on the table  12 outside and I appreciate greatly the staff  13 here helping me to get the Internet  14 downloaded to make the copies. But the  15 found..., the foundation of the Report on  16 Carcinogens listings and de-listing should  17 always be based on quality of science. You  18 know, as I had said in one of the comments  19 that I made, the chemical industry is a  20 science based industry and we employ  21 scientists, we consult with scientists and we  22 have a strong...have a foundational  23 philosophy that regulations and any kind of  24 decisions that affect our industry should be  25 based on science. And we're more than</p>
<p style="text-align: center;">Page 142</p> <p>1 of the record and up on the website and that  2 kind of availability. But if anybody wants  3 to see a copy of our comments you can  4 certainly get in touch with Rick or myself  5 or anybody at the NTP and we will be happy  6 to give you comments, they might even be  7 posted on our public website, I'm not sure  8 about that. So essentially, the ACC comments,  9 American Chemistry Counsel subcommittee, the  10 bulk of the chemical industry in the United  11 States has... would like to recommend several  12 improvements to the process and to the  13 criteria used in the Report on Carcinogens,  14 and one way of strengthening the scientific  15 quality is through strengthening the process.  16 I believe that that should be obvious. The  17 second is enhancing the public participation  18 processes in the development of the Report  19 on Carcinogens listing, and thirdly, we have  20 some recommendations on the clarification of  21 what the criteria should be for listing and  22 de-listing chemicals as Carcinogens.  23 I'm just going to go ahead, go on  24 and do a sidebar to say that in the  25 discussion this morning we've been talking</p>	<p style="text-align: center;">Page 144</p> <p>1 willing at the, and I think that's been  2 shown through time, if the science is...so  3 indicates, to take appropriate actions even  4 if it, you know, impacts on our industry and  5 I think that that's been shown most recently  6 in the whole P-Tox developments where 3M  7 voluntarily suggested removing them from the  8 marketplace. So anyhow, because the basis of  9 the RoC should be quality of science. It  10 should constitute comprehensive and thorough  11 reviews and interpretations of the best  12 available science. It should, scientific  13 experts, those with specific knowledge of the  14 issues involved should be involved in the  15 process. The process, whatever parts of the  16 process should be conducted in a manner that  17 fosters a dialogue, and the decision making  18 should be transparent and that goes hand in  19 hand of course with the concept of fostering  20 the dialogue. It means having open meetings,  21 stakeholder involvement, meaningful  22 opportunities for input and for scientific  23 interaction. Any changes then to the Report  24 on Carcinogens that NTP contemplates should  25 be focused on ensuring that these changes,</p>

<p style="text-align: center;">Page 145</p> <p>1 opportunities for input are enhanced. And of                  2 course, I mentioned earlier too in one of my                  3 comments that we have two new, relatively                  4 new directives that need to be thought about                  5 in the entire change process and that is                  6 what impact does data quality have to have                  7 on whatever goes on in the Report on                  8 Carcinogens and secondly, you know, how, how                  9 does the peer review requirements recently to                  10 come out promulgated by the Office of                  11 Management and Budget, how is that                  12 incorporated in this process?                  13 Just to go on a little bit, but                  14 really I would like to see enhanced                  15 processes that include the public and                  16 stakeholder participation, enhanced                  17 opportunities and not just writing comments                  18 that for all appearances go into the void                  19 and we don't ever know if there's been a                  20 response to the comments, but actually having                  21 it as more of an interactive process.                  22 That's what it's all about.                  23 So how do we propose to do that?                  24 We, at ACC a number of people were called                  25 together and we looked at the process as it</p>	<p style="text-align: center;">Page 147</p> <p>1 evaluates the same chemicals to...for their                  2 reproductive and...for their reproductive                  3 and...                  4 DR. GOLDMAN: Developmental.                  5 MS. LE HURAY:                  6 ...developmental, thank you, for toxicity,                  7 and looks at that in specific. So that                  8 process has been much more open and that is                  9 part of our recommendation. In our written                  10 comments we get into a detailed proposal,                  11 not necessarily the final thing, but a                  12 detailed proposal of how the CERHR process                  13 as it currently exists might be adapted to                  14 the Report on Carcinogens process. Just for                  15 those who might not be aware, off of NTP's                  16 website there is a flow chart for the CERHR                  17 process, which shows right from the very                  18 beginning an open nomination process, anybody                  19 can nominate for listing, and in the case of                  20 RoC for de-listing. The nominations are                  21 reviewed by NTP who brings some of them                  22 forward, this recommended, recommendations,                  23 lots of opportunities in the beginning for                  24 NTP to consider all the various important                  25 aspects about whether there's data available,</p>
<p style="text-align: center;">Page 146</p> <p>1 was before 1999. When we looked at the                  2 enhancements to the process that were made                  3 as a result of the meeting held five years                  4 ago, when we looked at the further                  5 enhancements that you had proposed in the                  6 Federal Register Notice and we thought, our                  7 basic problem is not going to be fixed; in                  8 our view, the basic problem was the, was the                  9 process which supported this dialogue. By                  10 just nibbling around the edges, and we would                  11 urge NTP to think about doing a sweeping                  12 change to the current Report on Carcinogens                  13 listing process, and we would promote as a                  14 model for that change something that NTP has                  15 done and has done very well, that is science                  16 based, that allows the opportunity for                  17 scientists who know the substances that                  18 they're considering very well to be involved                  19 from the very beginning in what has been a                  20 very open and transparent process and that                  21 is something like we know it's not an exact                  22 duplicate, there would have to be some                  23 modification, but something like NTP, CERHR,                  24 that's the Center for Evaluation of Risk to                  25 Human Reproduction, which essentially</p>	<p style="text-align: center;">Page 148</p> <p>1 whether it's timely, whatever it is that                  2 needs to be done to take the process                  3 forward, but there's public comment very                  4 early on, and including the ability to                  5 nominate who serves on these, what they call                  6 in the CERHR process the expert panels. Now                  7 as I understand the process the expert                  8 panel, as Dr. Roth was mentioning earlier,                  9 would not include somebody who has                  10 necessarily a direct stake because of their                  11 own research or because they were involved                  12 in legislating a particular, or writing                  13 regulation for a particular chemical or they                  14 were directly involved as you know industry,                  15 people whose portfolio included that                  16 chemical, but they need to have the right                  17 area of expertise and the right set of                  18 expertise to consider the data for that                  19 particular chemical or set of chemicals, and                  20 as a result of being involved in the                  21 nomination process and also, now perhaps it's                  22 been different at other CERHR meetings                  23 although I don't think it's been vastly                  24 different, because certainly those of us who                  25 have been involved and talked amongst</p>

<p style="text-align: center;">Page 149</p> <p>1 who've had what they might consider  2 unfavorable outcome as well as those of us  3 who've had experience with favorable outcomes  4 agree that the process is essentially a fair  5 process, that you can go in and talk and  6 present your point of view and at the end of  7 the day reach some sort of strong,  8 scientifically acceptable and valid  9 conclusion. So we told you what the CERHR  10 was. Our written comments, the ACC's  11 written comments, this is kind of a flow  12 chart that we made thinking about how to  13 change the RoC, adapt from the CERHR  14 processes into the RoC, we're not sure of  15 all of the legislative requirements for the  16 involvement of say the executive committee  17 and all the different government agencies,  18 you know, so around the edges and those kind  19 of requirements we may not have considered  20 everything. But we tried to incorporate  21 some of the regulatory requirements as we  22 understand them that are incumbent on the  23 RoC to include such as the interagency  24 involvement with being a more open and  25 interactive, transparent process, so in our</p>	<p style="text-align: center;">Page 151</p> <p>1 Rick did, but I'll try to answer any  2 questions that you have of me.  3 DR. GOLDMAN: This was very  4 quick, thank you very much. I do want to  5 ask you a question, at the beginning you  6 listed a number of points some of which you  7 didn't go into in as much detail and I  8 think, and there might be some shorthand  9 here, but I want to make sure I understand  10 them. Your slide that said scientific  11 quality, the third bullet point you mention  12 that NTP's efforts to revise the RoC process  13 will be advanced by activities to address  14 data quality and peer review directives of  15 OMB. I don't know if you can expand on  16 that, either here or, you know, when...  17 perhaps it's expanded on in the written  18 testimony, but I would just like to  19 understand what is meant by that?  20 MS. LE HURAY: Well, it's  21 ACC's belief and, that NTP's activities and,  22 and work product, shall we say, such as  23 Report on Carcinogens, the background  24 document for the Report on Carcinogens as  25 well as other materials like the CERHR</p>
<p style="text-align: center;">Page 150</p> <p>1 figure and we also have some detailed  2 writing about it. And then finally getting  3 on to the second point, and I only have one  4 slide about ACC's recommendation for the  5 criteria for listing and de-listing and we  6 could certainly say a number of things about  7 the criteria used by IARC or by EPA, but  8 just focusing on the criteria that NTP uses,  9 we feel like there's the distinction between  10 known human carcinogen and reasonably  11 anticipated has been blurred to the point  12 where the public can't really distinguish the  13 differences. And so we would suggest some  14 changes that we've discussed in more detail  15 in our written comments that would clarify  16 the distinction between known human  17 carcinogen, which would of course involve as  18 well epidemiological evidence that, of in  19 fact human carcinogenicity and making a  20 distinction between that and reasonably  21 anticipated. And then we also would agree  22 with some of the other commenters previously  23 today that the mechanistic information should  24 be included as a guide to your listing and  25 delisting criteria, so thank you very much.</p>	<p style="text-align: center;">Page 152</p> <p>1 monographs and the technical reports, the  2 ACC, maybe not the technical reports, I'd  3 have to look at that, believe that these are  4 subject to the Data Quality Act and  5 therefore it's incumbent on NTP in the  6 process to ensure for the three principles  7 in the Data Quality Act which are utility,  8 transparency and quality and there's specific  9 definitions in the DQA of what each of those  10 items entail, but for example, to take an  11 example of utility, if you are talking about  12 chemical A and you use information about  13 chemical B to make a decision about chemical  14 A, you have to show why that is useful, that  15 information about chemical B is useful in  16 reaching a decision about chemical A. And  17 they have...so, so then on peer review  18 tho..., those, those people in the room who  19 have dealt with the American Chemistry  20 Council know that we strongly believe and  21 promote peer review as a way to ensure that  22 the best quality science is produced by any  23 kind of process, whether it be published in  24 a peer reviewed journal or published by  25 government agency or science that we in fact</p>

<p style="text-align: center;">Page 153</p> <p>1 through the long range research initiative.  2 There's a strong peer review element in  3 that.  4 DR. GOLDMAN: Are OMB's peer  5 review directives in draft or final at this  6 stage? Are OMB's peer review directives  7 draft or final comments to this audience or  8 is this more a comment that you're making to  9 OMB?  10 MS. LE HURAY: Well, I think  11 it, I think it's a two part, okay, because I  12 think that while the draft peer review,  13 you're correct that they are currently  14 drafts, however, and I am not an expert on  15 either of these, I'm just giving you my  16 understanding of them, and my understanding  17 is that it does apply to the executive  18 branch and that OMB did issue a directive to  19 the executive branch that the peer review  20 directive was to be adopted. Now I could  21 be mistaken about that, but...  22 MS. BECK: I can clarify  23 that. This is Nancy Beck from OMB. We  24 released a draft bulletin on peer review and  25 we've received lots of comments from the</p>	<p style="text-align: center;">Page 155</p> <p>1 criteria as we understand it being developed  2 so, so I don't think that there's anything  3 additional proposed to, to meet it.  4 DR. GOLDMAN: Dr. Portier has  5 a question and then I'll ..... there are  6 some other questions up here.  7 DR. PORTIER: Yeah, there was  8 one additional step in your proposal for the  9 modification of SEER and I did want to ask a  10 little bit about that.  11 MS. LE HURAY: Okay.  12 DR. PORTIER: In the SEER  13 process the expert panel report is submitted  14 for public comment and given the public  15 comments on the SEER panel report and the  16 report itself, the NTP does a final  17 monograph, which is not sent out for public  18 comment or peer review prior to the release  19 of our public monograph, whereas here you  20 have in the RoC process, I believe you put  21 that in there. NTP draft monograph.  22 MS. LE HURAY: Right, and  23 that, that's one of the exclusive changes  24 that we would recommend go through the  25 CERHR, as a matter of fact, that lies within</p>
<p style="text-align: center;">Page 154</p> <p>1 process of going through those comments  2 before there'll be any final bulletin, so  3 right now it's just a draft.  4 MS. LE HURAY: Well, thank  5 you very much because I wasn't sure, but in  6 any case, we, you know, eventually presumably  7 there will be a peer review requirement and,  8 and it's better to think about how to  9 incorporate that now than to wait until  10 after it's implemented and then have to go  11 back and make changes.  12 DR. GOLDMAN: So then, one  13 last question then, so the proposed outline  14 of a process that you presented in your last  15 slide, is that to address all of these  16 points or...?  17 MS. LE HURAY: Well, it, it,  18 I would have to look at the, at the written  19 comments, but I know that in the discussions  20 that we had, my understanding of the process  21 that was proposed, it was proposed that the,  22 what the equivalent in the CERH process was  23 called the expert panel review, that that  24 would qualify as a peer review step as in,  25 you know, and fit within the peer review</p>	<p style="text-align: center;">Page 156</p> <p>1 there, as well as for the RoC. That there  2 be a draft and final monograph, to allow an  3 additional opportunity to comment because,  4 you know, we just love writing comments.  5 DR. PORTIER: We appreciate  6 the comments actually. Again, it's something  7 we will consider and, and look at very  8 carefully, it's a, it's an interesting  9 proposal. There are some slight differences  10 between the SEER process and the RoC process  11 in that the SEER process is an NTP  12 initiative, it's our choice to do this, it's  13 something we thought was important as a  14 public health initiative as compared to the  15 RoC which is a statut..., statutory  16 requirement that the Secretary has assigned  17 to us, so it's a slightly different process  18 in that the Secretary makes the final  19 decision, not us in the RoC. Just to note  20 that slight technical difference.  21 DR. GOLDMAN: I think if you  22 could...oh go ahead.  23 MS. LE HURAY: That's all  24 right. I was just going to say I think we  25 appreciate that although we didn't understand</p>

<p style="text-align: center;">Page 157</p> <p>1 all the implications of that, but, you know,  2 I mean the good news from our perspective  3 was that, you know, industry overall has had  4 a positive reaction to the CERHR process and  5 while we were trying to, you know, see,  6 well, what additional changes were, you know,  7 what was the effect of these changes that  8 you proposed in your Federal Register Notice,  9 what would be the effects of all these?  10 Well, this answers a lot of what industry's  11 problems have been historically with the  12 Report on Carcinogens, because even  13 implementing some of the changes that are  14 suggested in the, in the Federal Register  15 Notice, I think that everybody recognizes  16 that industry's basic problem is I, things  17 that I had mentioned a little earlier is  18 that we're a science based industry, we deal  19 with science and we would like to be able to  20 talk about the science and not have it so...  21 and not, not have our interaction be  22 relegated to the regulatory stage. Dr.  23 Goldstein's comments were I thought very  24 good, but I think that he needed to, to, to  25 refine it perhaps to understanding that our</p>	<p style="text-align: center;">Page 159</p> <p>1 Scientific Counselors step, at least not one  2 that I'm familiar with and so we would  3 suggest that they would be replaced by this  4 expert panel. Now perhaps...  5 DR. CARPENTER: Which would be  6 chemical specific, each, each...  7 MS. LE HURAY: They would be  8 chemical specific. Well, I think in our  9 written comments, if I'm remembering  10 correctly, that what we suggest is that  11 perhaps there could be like a core group of  12 some sort of core committee that, that could  13 be like a Board of Scientific Counselors  14 committee, but that you would explicitly  15 bring in some additional people who are  16 explicitly have expertise in the issues that  17 are important to that particular chemical or  18 set of chemicals. Now in the CERHR process  19 it has, I think we've been through about,  20 what, five or six cycles since the process  21 was re-instituted at the CERHR and there's  22 been one Board who've covered a number of  23 related chemicals, so there's one that was  24 just about a year ago, February of last  25 year, only covered two, but they were two</p>
<p style="text-align: center;">Page 158</p> <p>1 the, the data that are out there and the  2 processes that our chemicals, the health  3 effects of our chemicals, than anybody else  4 does, and, and we just think our input is  5 very valuable and it's very frustrating when  6 it doesn't appear as though anybody's  7 listening, so.  8 DR. GOLDMAN: Well, that's  9 what we're here to do now. I think a number  10 of questions from the panel, and I'm going  11 to go ahead and start with Dr. Carpenter and  12 just work my way across if that's okay and  13 you probably want to leave that up.  14 MS. LE HURAY: And if I may  15 just state, remember again, I'm not Rick  16 Becker so...  17 DR. GOLDMAN: We know.  18 MS. LE HURAY: And I don't  19 even plan on being.  20 DR. CARPENTER: So what the  21 American Chemistry Council is suggesting is  22 that the, the Board of Scientific Counselors  23 would be removed from this process?  24 MS. LE HURAY: Quite frankly,  25 I mean the CERHR does not have a Board of</p>	<p style="text-align: center;">Page 160</p> <p>1 light bulbs, so it was definitely light  2 bulb, propane light bulb. And then there  3 was another one that did four or five or  4 maybe even six studies altogether so now,  5 but I don't think that there is a BSC  6 subcommittee involved, am I wrong about that,  7 in the CERHR process?  8 DR. PORTIER: The Board of  9 Scientific Counselors reviews everything we  10 do with CERHR like all other aspects of the  11 program, but there's no specific subcommittee  12 for CERHR.  13 DR. DELZELL: Is, is  14 there...I know the, the CERHR process is,  15 CERHR process is relatively new, but has  16 there been any aspect of it that you would  17 criticize?  18 MS. LE HURAY: I know that  19 there have been... at one point, though we  20 think that that issue was resolved there was  21 some conflict of interest questions about who  22 was named or nominated to serve and I think  23 that those have been resolved, but quite  24 frankly, the, our biggest fear about going  25 in this direction that I'm suggesting,</p>



<p style="text-align: center;">Page 161</p> <p>1 proposing that NTP consider going in this  2 direction is that we are aware that the  3 current process could be... has been greatly  4 influenced by the participation of, of Jack  5 Moore and his, you know, perhaps unique  6 ability to be inclusive and to understand  7 who to include and how to get this done and  8 how to, to run it properly, but we think  9 that that's now been institutionalized, it's  10 been through, like I said, through four or  11 five cycles and our hope is that it won't  12 become a process where it all relies on one  13 person. So the process has worked very well  14 up 'til now, and we think that it's not just  15 Jack Moore's involvement that has resulted  16 in, in a very open and inclusive process.  17 DR. GOLDMAN: Okay, I can  18 tell you as I've, I've looked at the process  19 quite a bit over the years and the two  20 issues that have been raised again and again  21 have been the extent of the effort and  22 commitment by the outside expert panel  23 members, it's a tremendous amount of effort,  24 and many people after doing one have sworn  25 they would never do another, because it's</p>	<p style="text-align: center;">Page 163</p> <p>1 one time, it takes a long time, you're  2 right, I'm sure that the people who are  3 manning and woman-ing these expert review  4 panels spend a very large amount of time on,  5 you know, the work product has so far been  6 quite extensive, and they take ownership of  7 these expert review reports. So, you know,  8 since they're taking ownership, their name is  9 on it and that means they're going to spend  10 a lot more time on it. But we think that  11 in the end the result is a lot more  12 acceptable to, to the regulated community and  13 perhaps you would find that it wouldn't have  14 actually taken more time. I don't know.  15 You'll have more experience than you need, I  16 think, for that.  17 DR. DELZELL: The other thing  18 I, I wanted to ask you to comment on if  19 you'd like to, is that you and several other  20 people have mentioned that the, the peer  21 review response to public comments is often  22 not satisfactory and do, do you have any  23 comments about mechanisms for doing that?  24 MS. LE HURAY: Well, this is  25 the difficulty of my wearing the ACC hat</p>
<p style="text-align: center;">Page 162</p> <p>1 been nearly their entire job, you know, for  2 a couple of months to do it and nobody's of  3 course hiring them to do it. So, it's a lot  4 to ask volunteers to do and the second thing  5 has been the pace and the productivity. If  6 you compare the outputs with the outputs  7 from the RoC it's really no comparison at  8 all, it's a couple of orders of magnitude  9 different, so figuring out how to make that  10 kind of a process work that fast and then,  11 you know, maybe part of why people have  12 liked it is because it has been slow so  13 there's been a lot of time taken, but then  14 you don't have the public health benefit of  15 the analysis having been completed at the  16 end, so...  17 MS. LE HURAY: If I may just  18 add to that, I mean, another process that,  19 that, that is, has, has, is more like NTP  20 than CERHR, but that it has been more  21 inclusive in many ways, has been the IARC  22 process, and that's very different than what  23 NTP, you know, have done in this process,  24 but like Dr. Goldman was saying, they take a  25 smaller number of compounds to review at any</p>	<p style="text-align: center;">Page 164</p> <p>1 the, in, in that regard. How to and, and I  2 think that part of the overall problem, the  3 more standard problem, in my narrower  4 personal experience has been that the, the  5 peer reviewers, as I think Dr. Roth had  6 mentioned, are reviewing anything from, you  7 know, 10 to 12, perhaps a few more, few less  8 at any given RoC subcommittee meeting. They  9 have maybe an hour and a half to two hours  10 to spend on any given chemical, whether  11 it's one with very complicated issues or one  12 that there are no complicated issues, or at  13 least no dissent from the complicated issues.  14 I know I've been to RoC peer review  15 meetings where there have been nobody to  16 give public comments, and I, because I was  17 somebody who sits in the audience, nobody in  18 the audience who's really following what's  19 going on with a certain chemical. But then  20 there's other ones where there's been a  21 number of commenters but I think the members  22 of the, of the peer review committee, I  23 don't know how it is that they operate, but  24 I don't think they have a lot of time to  25 review all the materials they've been given,</p>

<p style="text-align: center;">Page 165</p> <p>1 including comments from the public, and I  2 would venture to guess that perhaps one of  3 their charges is not to specifically make  4 sure they're familiar with and respond to  5 those comments from the public, because none  6 of the proceedings are ever made public, you  7 know, other than the court reporters putting  8 out a transcript, that's the extent of what  9 is ever made public about those RoC  10 meetings.</p> <p>11 DR. GOLDMAN: And I can, I  12 can tell you my, my impression having served  13 not on the RoC subcommittee but certainly on  14 the BSC, that it seemed to me that the  15 members did feel that it was their job to  16 not only read all of the background document  17 but also all the comments that had been,  18 that had been submitted in. I think most  19 people do do the work, you know, do the  20 homework, but I can really hear the  21 frustration that you feel of seeing the  22 issues go by quickly without really seeing a  23 lot of discussion and I mean obviously that,  24 that would be frustrating and I think that  25 that's something that we've heard earlier</p>	<p style="text-align: center;">Page 167</p> <p>1 NTP add that language, so thank you.  2 DR. GOLDMAN: I want to keep,  3 I want to keep moving down the table and  4 then there are some hands up in the audience  5 as well but, no. Mark?  6 DR. TORAASON: Two questions.  7 One is, on this particular slide, one thing  8 that I'm trying to incorporate here is a  9 hallmark of the RoC and that's this voting  10 process that, you know, RG1, RG2, RG3 and  11 you sort of have a tally, which I think  12 probably plays heavily on the director in  13 trying to make a decision seeing how these  14 group, and I don't see that in here, or  15 having a real clear idea of how you would  16 either just get rid of that or incorporate  17 it into this. The other question is, the NTP  18 has a mandate to, to list or not to list,  19 do you think what you're proposing is  20 actually going to have an impact, I mean  21 there are, are there examples where the  22 outcome would actually be different if you  23 added all this extra elements of review or  24 are we adding more, something more to  25 achieve the same end?</p>
<p style="text-align: center;">Page 166</p> <p>1 today as well, so it's a, it's an important  2 point. You wanna, Chris?  3 DR. PORTIER: I, I want to  4 echo some of Lynn's points about that, that,  5 those being very important points, I just  6 want to make sure I didn't hear something  7 incorrectly. The RoC meetings, the, the  8 public part of the RoC meetings is the whole  9 meeting for the Board of Scientific  10 Counselors. There are no additional meetings  11 of that Board that occur other than in that  12 public meeting. The laws of the FACA require  13 that. I will note there is a substantial  14 difference between the IARC process and the  15 RoC in that none of the IARC meetings are  16 public. The votes are not public, what's  17 included or excluded from their documents is  18 not public, it's a very closed process, so,  19 and, and I think you want to be very careful  20 in making that comparison given some of your  21 other comments about openness.</p> <p>22 MS. LE HURAY: And I, and I,  23 and I agree, and I should have left them  24 alone, you're correct, because it's not  25 something that ACC is proposing, that, that</p>	<p style="text-align: center;">Page 168</p> <p>1 MS. LE HURAY: I, I, I would  2 say, to respond to your second question  3 first, I would say that it could impact  4 potentially outcome in that if you include  5 in outcome what is the documentation for the  6 decision that's made. The documentation for  7 the decisions that are made now, as you all  8 know, the RG1, you get a short summary  9 without any discussion of the basis for the  10 vote. For RG2 you get a short summary  11 without any discussion of the basis for the  12 vote. For the Board of Scientific Counselors,  13 you get a summary and it's, and you don't  14 get a, any kind of a sense of the often  15 quite intense discussions that happen in  16 those one and a half to two hours that you  17 have to devote to, to your chemicals. So to  18 compare this with the RoC process, what  19 we're really doing when you think about it  20 is that up through the point of the final  21 expert panel, a lot of what we're doing here  22 is proposing a new way for developing the  23 background document. Okay? And it's much  24 more focused on, you know, involving the  25 experts, involving industry, talk, talking at</p>

<p style="text-align: center;">Page 169</p> <p>1 the science level. Now we go then it gets  2 turned into what we call here a monograph  3 because we're simply duplicating language  4 that the CERHR is using, which as they call  5 there the NTP produced document, a decision  6 document, if you will, the monograph, and so  7 how, how that exactly would be, how, how it  8 would work to fit in, there's some sort of a  9 requirement that we have in RG1 and RG2, you  10 have to duplicate those, but then I think  11 that could be worked in, but it would happen  12 after the final expert report was issued, I  13 think is where it, would be where it would  14 fit, and so it might be beneficial, though,  15 to these groups to the extent that the  16 expert panel would come to some  17 recommendation.  18 DR. GOLDMAN: I mean, in  19 essence, you're also in a sense eliminating  20 the background document step in that the  21 expert panel is writing the document, the...  22 in a way that the draft expert panel report  23 might be the background document although it,  24 it has seemed to me, I've observed a couple  25 of the CERHR efforts that, the CERHR staff</p>	<p style="text-align: center;">Page 171</p> <p>1 is, is suggesting is that the overall amount  2 of interaction and transparency, that, you  3 know, nothing is ever going to be perfectly  4 transparent in this kind of a process, but  5 that certainly there could be a lot more  6 dialogue earlier on in the process, and I  7 think it would behoove everybody and improve  8 the process from everybody's perspective.  9 DR. GOLDMAN: Question from  10 the audience, please identify yourself?  11 MR. NIDEL: I have different  12 kinds of reactions maybe to what you just  13 were talking about. The first is regarding  14 the scientific quality, it seems like maybe  15 the posit..., you know, it just seems like  16 there's an aim to focus a hundred percent  17 on science rather than any bit on policy and  18 I guess from maybe an uneducated public  19 perspective it seems like we have to  20 remember that there is a policy element to  21 this despite the fact that the focus is on  22 getting the science correct. You know,  23 this, the Report on Carcinogens has very  24 policy based impacts and I think that there  25 are policy considerations that should be</p>
<p style="text-align: center;">Page 170</p> <p>1 do put some effort into filling the  2 information, you know, at least the  3 scientific data, you know, in, in a, in a  4 way they have it, and in some sense they  5 do have a background document but it, it  6 isn't called that and it gets worked over by  7 the expert panel before it becomes a draft  8 and so ... you know, I think that's another  9 thing that's worth thinking, someone has to  10 do that work, right, for the reviewers?  11 MS. LE HURAY: And I'm not  12 sure, you know, what happens behind the  13 doors of the CERHR, if you will. I mean,  14 the expert panel puts their name on this  15 report, the initial draft which is the peer  16 review draft, who prepares that, what sort  17 of process it goes through, that's very  18 opaque to me. I mean I have seen some of  19 those peer review jobs and seeing that  20 there's, you know, uneven quality, some are,  21 are more complete, some sections are more  22 complete than other sections, but that's to  23 be expected, you know, in something that's a  24 draft, but how that's produced I'm not  25 certain. And I think what I, what, what ACC</p>	<p style="text-align: center;">Page 172</p> <p>1 taken into account that are not going to  2 meet the same strictures as a scientific  3 standard. You know, an example would be the  4 kind of evidence that the government would  5 use to elevate a terror threat. If it's, if  6 it's a threat of great magnitude they're not  7 going to, you know, the credibility of the  8 evidence may not be as great, which brings  9 up kind of a conflict between the industry  10 and the policy which is, the greater market  11 there is for a product, the greater desire  12 the industry has to hold it to scientific  13 standard because this is a profitable product  14 that's, you know, going out to many people.  15 But from a policy perspective, that's even  16 greater weight in favor of the precautionary  17 principle and trying to protect the public  18 from the impact of that compound, I think  19 you brought up the 3M example and I, I may  20 not have the full, I mean I've read various,  21 you know, accounts of that example, but from  22 what I understood it was based on, that they  23 recalled based on the findings that Scotch  24 Guard or these compounds were in the blood  25 of people all throughout the globe rather</p>

<p style="text-align: center;">Page 173</p> <p>1 than some scientific evidence that said that 2 that was necessarily a health threat. 3 MS. LE HURAY: I, I do not 4 know the details myself of the P-tox 5 example, but let me respond to two questions 6 that you asked. One, one is, I mean, I, I 7 don't think that from a policy perspective 8 that this proposal makes any changes to what 9 I think I've heard most people say here 10 which is that policy discussions come after 11 the NTP has reached their conclusion. This 12 would still keep that conclusion, you know, 13 based on science, leave it up to the, the 14 regulators or policy makers to take that 15 conclusion, that whatever it is that NTP 16 reaches, and apply what they think is 17 appropriate to do with it. So, for example, 18 to, to stick to the CERHR example, 19 California also uses the CERHR as an 20 authoritative body to identify compounds as 21 developmental or reproductive toxins and they 22 have regulations based on that so, so NTP 23 reaches the scientific conclusion. This is 24 whatever, low concern, high concern from the 25 point of view of develop, developmental or</p>	<p style="text-align: center;">Page 175</p> <p>1 with some caution because I mean I've worked 2 with chemicals that had come out that were 3 listed in the 10th and the 9th report that 4 were never indicated to me by the industry 5 that I worked within and for, to be of any 6 hazard. So I think that there is, there is, 7 it's, it's not a hundred percent that the 8 industry knows best, I guess is what I would 9 say, even though they may be the people who, 10 you know, have patented or invented or you 11 know, come up with and handled these 12 compounds in huge volume. 13 MS. LE HURAY: Well, then, I 14 think we have a basic disagreement, but I 15 think what we can agree on is this, that to 16 the extent that science is never going to be 17 a hundred percent knowable because it's 18 science, it's not engineering where you can 19 have an equation and fill in the slot. 20 Industry has gone to great lengths to learn 21 about these chemicals and usually, maybe 22 there's exceptions, but usually industry will 23 try to know a little more and does know a 24 little more than people who have not focused 25 on those chemicals because they're not</p>
<p style="text-align: center;">Page 174</p> <p>1 the state of California goes forth and 2 regulates on that basis. So the policy, I, 3 and I think that's what I've heard before. 4 Then the second thing that I'd just like to 5 say is that in fact it's just the other way 6 around typically, which is that typically 7 your lower volume chemicals are more 8 profitable than the commodity chemicals that 9 are out to, out there, you know, used in 10 great bulk, because typically lots of those 11 are made and the prices are very low. 12 MR. NIDEL: Well, I, I 13 think, I mean, that probably depends a lot 14 on the product. My, my other response to 15 what you've said is you, you've referred to 16 industry as being scientific and knowing, you 17 know, kind of in a, just having, having a 18 good knowledge of these compounds and of 19 their chemical, you know, properties and 20 potentially their, their health effects and I 21 guess what strikes me as someone who is a 22 scientist that used to work in the industry, 23 I don't necessarily agree that that's true 24 and I just want to say that to take, I 25 guess my comment is to take what you're</p>	<p style="text-align: center;">Page 176</p> <p>1 focused on learning about those chemicals, 2 and that's one thing we do, I mean, we try 3 to know our products, so. 4 DR. GOLDMAN: Anybody else? 5 Okay. I guess one more, one more question. 6 DR. MOURE ERASO: It seems 7 that, that your proposal what I notice is 8 that you basically have very little 9 confidence on the expertise or scientific 10 ability of the people that do the work in 11 the NTP and NIEHS and the animal experiments 12 or the people that are called to be in the 13 Board of Scientific Counselors? 14 MS. LE HURAY: No, we, we 15 think that's not the case at all and I, I 16 would be the last person to, to personally 17 and I think that the ACC as well, to, to 18 question the credentials of any of the 19 people because we know the good work and we 20 are as supportive of much of the work that 21 NTP does as we sometimes will be critical of 22 the work that NTP does. It all depends on 23 circumstances. But we think that everybody's 24 in a bad situation and particularly the 25 Board of Scientific Counselors because quite</p>

<p style="text-align: center;">Page 177</p> <p>1 often we will see, you know, you've heard  2 other people say, for example, with the  3 background document which is, you know, the  4 basic document on which it's supposed to be,  5 which is the document of record supposed to  6 present the, the data on which decisions are  7 made. Sometimes that's not available until  8 very late in the process. Now I know there's  9 been a concerted effort to try to make that  10 available earlier and that's one of the  11 proposed changes that Dr. Jameson has  12 proposed in the Federal Register Notice to  13 the RoC process. But it's still been the  14 case in the past and we would hope that it  15 would not be in the future, if the process  16 were not to change, that, I, I have spoken  17 with people who served on these boards and  18 one thing that I have taken away from it is  19 that they feel very inundated because  20 oftentimes very late in the process,  21 sometimes a week or two, and if they're  22 lucky three or four, before the actual  23 meeting, mounds of paperwork all of a sudden  24 start appearing in their office. Which  25 includes the background document, the public</p>	<p style="text-align: center;">Page 179</p> <p>1 DR. MOURE-ERASO: They're not  2 supposed to, yeah.  3 DR. GOLDMAN: And I think, I  4 think that it has in common in both  5 instances in reality there's a background  6 document that is developed by a contractor.  7 Maybe in one case it's more visibly that  8 than the other but the I... as far as I  9 could always tell in with the process for  10 the developmental and reproductive toxicants  11 that the contractor does get it started.  12 Even though the expert panel finishes it,  13 there is that support that's given to the  14 experts. But I, I would agree that it, it  15 would be a very radical change, it's a...  16 MS. LE HURAY: And, and  17 that's, that's one of the things that we  18 recognize right at the very beginning, that  19 this is a sweeping change that we're  20 proposing, but we would suggest that we, we  21 had changes that we proposed at the meeting  22 five years ago, and there were, some of  23 those changes were implemented and  24 incorporated, but some of our experiences in  25 the last five years have been not that much</p>
<p style="text-align: center;">Page 178</p> <p>1 comments. You know, if you have a longer  2 period of time and you're reviewing, say,  3 ten chemicals but sometimes the, the timing  4 is very tenuous, and we've experienced that  5 because we oftentimes want to present  6 comments and we have perhaps one chemical to  7 review and feel as though we're being  8 stretched for time. Now perhaps it's, it's  9 different.  10 DR. MOURE-ERASO: But your,  11 your proposal is pretty radical... you're  12 saying, you're saying to basically dissolve  13 the Board of Scientific Counselors and stop  14 NIEHS to prepare the draft document and give  15 it to a panel of experts that supposedly  16 will, will come from another side, and it's  17 pretty radical.  18 MS. LE HURAY: Well, and I  19 agree with that, but I also think the Board  20 of Scientific Counselors to be able to look  21 at this would not be involved in developing  22 the background documents in any case.  23 DR. MOURE-ERASO: Not supposed  24 to.  25 MS. LE HURAY: Exactly.</p>	<p style="text-align: center;">Page 180</p> <p>1 different than the experiences were before  2 some of those changes were incorporated and  3 we said okay, well, why is this, what is at  4 the heart of the issues that we have? And  5 it really has to do with having a chance for  6 real input by the public early in the  7 process. Currently the, the opportunities to  8 comment come very late in the process,  9 after, essentially the science has been  10 reviewed in the background document and  11 that's the, the, you know, it's said to be  12 the, the document of record and as Dr  13 Portier said earlier, you know, once RG1  14 has, has reviewed it, there's no changes.  15 Well, we do not, the public doesn't have a  16 chance to comment before RG1 has reviewed  17 it. So it, it, it's kind of a little loop  18 system where, where we're frustrated by that  19 lack of involvement.  20 DR. PORTIER: I'd like to make  21 a correction. At least from my experience on  22 the Board for the last four years, I'm  23 finishing up the fourth year of my term, a  24 week or two, that's clearly not the case.  25 These, these background documents are, are</p>

<p style="text-align: center;">Page 181</p> <p>1 Oftentimes the inundation of, of materials  2 toward the end of the time period that  3 you're looking at are public comments. Those  4 are things that are being, coming in late to  5 us and because we all do make every effort  6 we can to look at the public comments,  7 personally I guarantee you that that goes  8 into my consideration of, of the information  9 but that's what takes the time right at the  10 end, it's not the background documents.  11 MS. LE HURAY: Yeah, but part  12 of the reason for that is that the public  13 comments, the background documents are not  14 made available to the public. You're seeing  15 it for the first time. Dr. Piccirillo,  16 who's giving the last speech of the day will  17 be talking about a case where the background  18 document was made available, I don't know,  19 was it six or seven weeks before the RoC  20 meeting and because we were trying to, you  21 know, get the comments in time for RG2, we  22 put together those comments in 10 days. But  23 you know, this is, we're not making comments  24 on policy here, you're making comments on  25 science and that sometimes take a long time</p>	<p style="text-align: center;">Page 183</p> <p>1 is an opportunity for a public comment on it  2 and we... it's been mentioned... I'll make a  3 couple of public comments. First of all the  4 SEER process is changing, we want to be  5 certain that we are in fact in line with  6 current peer review practices of the U.S.  7 government. And so the panels that make up  8 the SEER review committees are no longer  9 going to be ad hoc NI..., NTP panels, they  10 will in fact be special emphasis panels  11 which is a special government type of issue  12 and it's going to have, they will have a  13 slightly different make up to them than they  14 have previously, you will see because of  15 that factor. There's a number of things  16 that will be changing in that process you  17 should be aware of, and I would just keep an  18 eye on it since you've paid so much  19 attention to it. I would keep an eye on it  20 over the next few months as we actually  21 change the way in which that process works,  22 again keeping in line with what's happening  23 within the U.S. Government.  24 DR. GOLDMAN: Could you, could  25 you, what do you mean by special emphasis,</p>
<p style="text-align: center;">Page 182</p> <p>1 to develop. So if I had a wrong impression,  2 my, I think our impression is based on when  3 things get posted on the website. So...I'm,  4 I'm glad to hear that it's different for the  5 RoC committee.  6 DR. GOLDMAN: That's good to  7 have that clarified. That's important  8 because, I mean I do think that there was a  9 time several years ago when there, there  10 were documents that came late and so maybe  11 that's an impression that has been left but  12 I hadn't heard that for a long time either.  13 Okay, well, if it's okay with everyone, I'm  14 looking around here, why don't we go ahead  15 and move to our last speaker?  16 MS. LE HURAY: Well, I thank  17 you all for your patience, because like I  18 said, I'm not Rick Becker.  19 DR. GOLDMAN: You, you're  20 better than Rick Becker. We, we were pleased  21 to have you. Thank you so much. Yes, Chris.  22 DR. PORTIER: While we're  23 moving to the next qu..presenter, I'm going  24 to make a few comments about the SEER  25 process to make sure it is clear since this</p>	<p style="text-align: center;">Page 184</p> <p>1 just so... put it in English so that...  2 DR. PORTIER: It's hard to  3 put into English. The...you, you can think  4 of panels as falling into three different  5 categories. So you are made up of, to some  6 degree, representatives of our Board of  7 Scientific Counselors and past and present  8 and Executive Committee, past and present,  9 but as such you're an ad hoc advisory panel  10 for NIEHS in this particular capacity at  11 this particular time. In those cases we can  12 pretty much put whoever we want on such a  13 panel. If we really want something to, to,  14 to match up to where we, the, the Federal  15 Government thinks should, thinks should be in  16 terms of balance of expertise, balance of  17 location across the country, gender, et  18 cetera, then in fact we move into a more  19 formal category and special emphasis panels  20 fall into that category. It changes the way  21 the members of the panel are viewed as to  22 whether they're government employees or not  23 government employees as compared to in this  24 capacity, you are not government... you're  25 not actually government employees, you're</p>

<p style="text-align: center;">Page 185</p> <p>1 coming in as a one day advisor. In those  2 cases it's a slightly different set of rules  3 on conflict of interest. Then finally you  4 have a third level of advisory panel, that's  5 our Federal Advisory Committee Act fan,  6 panels, those are formal panels, they're,  7 they stay for long periods of time. Our  8 Board of Scientific Counselors is such a  9 panel. There's an actual process involved in  10 getting names on to such a panel, in review  11 of such a panel, there's formal evaluation  12 of conflicts, number of issues go into that,  13 so, the SEER panels are moving up out of  14 sort of this ad hoc into the special  15 emphasis panel category because we feel it's  16 appropriate for the activities they do. The  17 Board is a higher level panel in terms of  18 the activities they do in the requirements  19 for evaluation of their efficacy on that  20 panel or whatever.</p> <p>21 DR. GOLDMAN: So, basically  22 what he's really telling us is that we're  23 not special. Okay, there's another piece of  24 testimony that has been brought in from  25 James McGraw. It is several pages long and</p>	<p style="text-align: center;">Page 187</p> <p>1 because you've heard them several times  2 already. One of the main frustrations of the  3 Naphthalene panel during the RoC process was  4 the fact that it did not appear that there  5 were really substantive opportunities for  6 public input into the Naphthalene process.  7 And I think that this comes down to the fact  8 that even though it appeared that certain  9 time lines were, were in place that for  10 various reasons things were moving along very  11 quickly, not allowing really the, the public  12 input process to its full avail. As an  13 example with the, with Naphthalene, NTP  14 elicited recommendations on the listing of  15 NTP through the RG1 process, the RG2 process  16 and then took it to the BSC RoC  17 subcommittee. Unfortunately the RG1 review  18 occurred well in advance of the draft  19 background document, the RG2 review then  20 occurred before publication of the draft  21 background document and we really had, and,  22 and after and prior to the date of receipt  23 for public comments. So we really were  24 enmeshed in trying to provide comments,  25 trying to meet these time lines and I think</p>
<p style="text-align: center;">Page 186</p> <p>1 to spare all of you the agony of hearing me  2 give it a dramatic reading, what I'm going  3 to do is virtually read it into the record,  4 kind of like the way members of Congress  5 read things into the record. If you've ever  6 gone to a, a congressional hearing and then  7 you see the hearing record and later  8 they're, it's there. If that's okay with  9 everybody. We, we, we will pass out copies  10 if everybody would please read the testimony,  11 is, is that okay? Great. All right, so we  12 have one last presentation and this is  13 Vincent Piccirillo from Coppers and American  14 Chemistry Council, the Naphthalene panel.</p> <p>15 DR. PICCIRILLO: Good  16 afternoon. The Naphthalene panel of the  17 American Chemistry Council appreciates this  18 opportunity to talk with you today and  19 provide our comments on the review process  20 used by the National Toxicology Program in  21 the Report on Carcinogens process. I've heard  22 a number of comments earlier today which  23 actually paralleled the comments I was  24 planning to make and so I will not spend a  25 lot of time dwelling on those comments</p>	<p style="text-align: center;">Page 188</p> <p>1 from some of the earlier discussions, if we  2 had set time lines for the various reviews  3 or the various time periods for getting in  4 comments, this would really help the industry  5 to provide substantive comments on each of  6 these documents or to assure that the  7 underlying science involved with the chemical  8 does get to the hands of the scientific  9 reviewers. We know full well that NTP spends  10 a lot of energy in doing the literature  11 searches and reviewing the literature they're  12 able to find but if you look at the  13 industry, they're spending a lot of time  14 also looking at these chemicals and may be  15 well aware of documents of publications which  16 may illuminate the process of the, of  17 carcinogenicity for a particular chemical.</p> <p>18 In the current RoC process it really  19 seems that it's the, the Board of Scientific  20 Counselors subcommittee that is the principal  21 opportunity for public engagement and it is  22 based on this, these public comments that a  23 lot of decisions appear to be moved forward.  24 One of the things that we, we do feel is  25 that the time for public participation should</p>

<p style="text-align: center;">Page 189</p> <p>1 be much earlier than that in the process. As  2 was indicated, the public actually has 7  3 minutes in which to put forward their  4 comments on what could be some very  5 complicated issues in regards to things such  6 as mechanisms of carcinogenicity. Or  7 specifi...specificat...specificities regarding  8 the metabolism of the chemical. So it really  9 doesn't give a lot of time to really get  10 involved in the, the process with that, with  11 that Board. With Naphthalene, however, there  12 was something else that was brought up this  13 morning which is very important to us. And  14 this was the issue around the establishment  15 of closing dates for submission of scientific  16 literature or publications which would be  17 relevant to the deliberations of the  18 subcommittee. In the November 2002 RoC  19 subcommittee meeting we sh..., we saw a case  20 which we feel ne..., we need to bring  21 forward to the group so that similar things  22 don't happen in the future. In this  23 deliberation it was obvious that the basic  24 principles of the Data Quality Act, that is  25 objectivity, transparency and utility, were</p>	<p style="text-align: center;">Page 191</p> <p>1 objectivity, the transparency and the utility  2 of the Data Quality Act process were  3 violated for the following reasons. First,  4 the work of several well regarded,  5 independent academic researchers who've  6 extensively published on the toxicology of  7 Naphthalene and was presented in the draft  8 background document were criticized. The  9 widely accepted work was dismissed as being  10 of little value by the chairman, who based  11 on search of the literature, has not  12 published any research on Naphthalene.  13 Second, the public was not permitted to see  14 either the newly submitted document or the  15 publications that were said to form the  16 basis of the documents at the subcommittee  17 meeting. No public comment was sought either  18 at the subcommittee meeting or since the  19 presentation or were any changes made to the  20 background document to reflect the  21 discussions of the, of the chair on these  22 new documents. Third, since the RoC  23 subcommittee meeting, NTP has provided to the  24 Naphthalene panel a list of three references.  25 These three published papers were purported</p>
<p style="text-align: center;">Page 190</p> <p>1 compromised. And the rationale for saying  2 this is because the subcommittee chairman  3 temporarily stepped down from his job as the  4 chair to join the discussion of Naphtha...,  5 Naphthalene and to participate in the vote.  6 The chair also then provided a document to  7 the subcommittee members just prior to the  8 break and suggested that the subcommittee  9 members review that document during the break  10 because he would be making substantive  11 comments after the break. Following the  12 break, the Naphthalene panel was given its  13 seven minutes to make its comments and it  14 was then followed by oral presentations by  15 the chair, and this was a highly technical  16 presentation to the sc..., to the  17 subcommittee, including new information not  18 previously shared with the subcommittee nor  19 made part of the public record. The members  20 of the public present at the meeting were  21 neither permitted to see the materials on  22 which these judgments were being based nor  23 to ask questions or give additional  24 information or clarifications to some of the  25 things that were discussed. The ob...,</p>	<p style="text-align: center;">Page 192</p> <p>1 to be the basis of the document distributed  2 to the subcommittee members at the meeting.  3 The panel has reviewed this literature and  4 found that these data are of little to no  5 utility to the understanding of the  6 Naphthalene carcinogenicity. In the absence  7 of further information the panel can only  8 conclude that the presentation made by the  9 subcommittee chair was a personal opinion  10 unsupported by published literature. The  11 acceptance of the chair's privately  12 distributed document by the RoC subcommittee  13 without a review of these underlying  14 publications calls into question the  15 reliability of the decisions made by the RoC  16 committee. We feel that it was important to  17 bring these to your attention. It's very  18 important that these reviews also be unbiased  19 and we talked about bias this morning. We  20 hope that these types of deviations will be  21 considered in adopting some of the new  22 processes for the RoC to hopefully avoid  23 such situations in the future. Another  24 thing that we feel is, is also very  25 important is that the procedures for listing</p>



<p style="text-align: center;">Page 193</p> <p>1 should be clarified. One of the things that  2 came up during the subcommittee discussions  3 was that one of the members was not sure how  4 to deal with Naphthalene. He felt that it  5 was essential to go back and take a look at  6 other chemicals showing similar profiles as  7 far as carcinogenicity in animals,  8 genotoxicity, et cetera, to see how previous  9 subcommittees had dealt with those issues.  10 And it was his impression from going back  11 and re-looking at the RoC, the 9th and 10th  12 RoCs, that none of the chemicals that had  13 the same data or similar data to Naphthalene  14 were listed. So we feel it might be  15 important for NTP to try to put together  16 some kind of a, of a guidance that would  17 help in the committee's abilities to take a  18 look at the data, see what kind of  19 precedents may already have been set and  20 then determine if this chemical truly does  21 fit or not. This way, at least there will be  22 some clear pattern for the subcommittee to  23 move forward. Based on these experience,  24 experiences, the Naphthalene panel fully  25 supports the discussions that Dr. Le Huray</p>	<p style="text-align: center;">Page 195</p> <p>1 DR. PICCIRILLO: It, where it  2 became very difficult, Dr. Portier would  3 like, where it became very difficult for us  4 is the fact that the RG1 vote was 6 to 1...  5 DR. GOLDMAN: Okay.  6 DR. PICCIRILLO: ...to list,  7 the RG2 was 4 to 4.  8 DR. GOLDMAN: So RG1 was 6 to  9 1 to list, RG2 was a 4, 4 split.  10 DR. PICCIRILLO: 4, 4.  11 DR. GOLDMAN: Uh-huh.  12 (Indicating affirmatively.)  13 DR. PICCIRILLO: Yeah, and...  14 DR. GOLDMAN: I mean...and  15 I'm not usually focused on vote counting, I  16 was just wondering how things were, you  17 know, going before that.  18 DR. PICCIRILLO: What, what I  19 felt was rather interesting is that there  20 were some very good questions brought up by  21 some subcommittee members which seemed to be,  22 the decision was we can discuss these later,  23 but yet when the discussion turned to these  24 underlying documents some of those questions  25 were really never answered.</p>
<p style="text-align: center;">Page 194</p> <p>1 made in regards to making some sweeping  2 changes in the RoC process. Hopefully this  3 will increase the transparency of the process  4 and also lead to more meaningful science  5 ba... meth..., science based methodologies.  6 Thank you.  7 DR. GOLDMAN: Thank you very  8 much. I actually want to start off with a  9 question for you. I really can appreciate  10 from your description of what happened at  11 the, at the, I take it that was the BSC RoC  12 subcommittee that you were describing...  13 DR. PICCIRILLO: Yes.  14 DR. GOLDMAN: ...that...I, I  15 wasn't there so I can't really comment on it  16 obviously, but it sounds like it would've  17 been a fairly trying experience if it really  18 went as you described it. I was wondering if  19 it made a substantive impact though on the  20 way things were going, I mean what, what  21 were the votes like for the RG1 and RG2  22 committees and I mean did it, you know, did  23 this like change the tide in the way things  24 were going or, you know, where were things  25 going before it went there?</p>	<p style="text-align: center;">Page 196</p> <p>1 DR. GOLDMAN: Yeah.  2 DR. PICCIRILLO: One of the  3 other things that we wondered about, coming  4 back to the timing and the amount of time  5 that, that the subcommittee members actually  6 have in their review, I think it may be true  7 that, that some of these documents do arrive  8 in exceptional time for the members to  9 review them. But it's a matter then of the  10 time available because if, I noted that  11 there were a number of questions being  12 raised by some of the committee members that  13 were things that probably should've been  14 considered, looked at earlier.  15 DR. GOLDMAN: Mm-hmm.  16 (Indicating affirmatively.)  17 DR. PICCIRILLO: For instance  18 there was a, a discussion about whether  19 genotoxicity data are relevant to the  20 carcinogenic process. And it was obvious that  21 no one really had taken a look at the weight  22 of evidence approach to using gene tox data  23 that EPA had promulgated a number of years  24 ago. So, the, the lack of genotoxicity for  25 Naphthalene just seemed to be discarded. So</p>

<p style="text-align: center;">Page 197</p> <p>1 it's just some of these sorts of things made  2 me at least have a sense that, that many of  3 the committee members, the committee members  4 are working in the thick, but in some cases  5 they may not have really had the time...  6 DR. GOLDMAN: Yeah.  7 DR. PICCIRILLO: ... to  8 completely get involved in the issues.  9 DR. GOLDMAN: Well, let me  10 provide you with a bit of reassurance having  11 worked with science committees like this a  12 lot over the years and scientists of fairly  13 high caliber and I've never seen a s...you  14 know, a group like that who, you know,  15 somebody at the last minute throws something  16 over the transom, and it doesn't contain  17 data and... that's what you described, that  18 that would sway them away from looking at  19 data that they had reviewed and, and I, I,  20 you know, it must have been painful to  21 watch that, but I don't believe that that  22 kind of stunt, whatever it was that you  23 observed, would have distracted a group of  24 scientists from the actual data that they  25 were looking at, and I think that's</p>	<p style="text-align: center;">Page 199</p> <p>1 available for everybody to discuss. The.. It  2 happens that, that, that the person that was  3 a member of the panel, was the chair, has  4 done studies in his group of study in UCLA  5 and presented this data as one scientist  6 making a comment on, on Naphthalene and this  7 was presented as any other evidence that  8 everybody else presented. And, and I really  9 reject the characterizations of lack of  10 transparency or attempt to influence the  11 votes of people, I think it's insulting to  12 say that. And the transcripts of the meeting  13 are available and I recommend that everybody  14 that is interested in this should read it  15 and you'll see exactly what happened there.  16 DR. GOLDMAN: And I, I  17 didn't mean to imply that I was accepting  18 any one version of it, but I certainly can  19 see that from the perspective of our  20 presenter that what happened there didn't  21 feel that way and, you know, so this is one  22 of those disputes that we're not here to  23 settle. We're really here to see if the  24 process has a problem in.....  25 DR. PICCIRILLO: Yeah, I, I</p>
<p style="text-align: center;">Page 198</p> <p>1 important, you know, for you to hear. And,  2 and also that, by the way, there, there has  3 been a change since EPA promulgated those  4 guidelines some years back in terms of, you  5 know, an earlier belief that all, all  6 carcinogens are genotoxic agents and, and a  7 greater degree of sophistication that genes,  8 gene expression can be affected in many  9 ways, in ways that cause cancer without  10 classically being quote, unquote, genotoxic  11 in terms of the in vitro tests and so forth,  12 which I'm sure you're aware of. Why don't I  13 go ahead and open it up for comment? I  14 don't know if anybody...um, yes?  15 DR. MOURE-ERASO: Well, first  16 of all I would like to caution Dr. Goldman  17 to accept one description of what happened  18 as what happened.  19 DR. GOLDMAN: But I wasn't  20 there.  21 DR. MOURE-ERASO: Exactly, I,  22 I was a member of the committee and I  23 disagree with the perspective that is being  24 presented here. I don't think that in any  25 way, the, the, the evidence that was</p>	<p style="text-align: center;">Page 200</p> <p>1 think where, where our comment comes in is  2 the fact that we have a very short time in  3 which to make our presentation. Had this  4 document been submitted as part of the  5 public comments, it would have been available  6 to us. It would've placed us in a position  7 where our 7 minutes would've been spent  8 discussing that document and the relevance of  9 that document rather than spending the 7  10 minutes discussing some issues and things  11 which were already covered within the  12 background document itself.  13 DR. TORAASON: This may not  14 be a fair question, but, you, you mentioned  15 advocates and it was mentioned earlier in  16 the, in the day, but there was also the, the  17 idea of expert panels. Don't expert panels  18 by their nature have advocates on them and  19 how do you resolve that?  20 DR. PICCIRILLO: That, that  21 very well may be true, that depends on the  22 make up of the, of the panels, depends on,  23 on the selection process for putting the  24 panels together. So...I don't know if there  25 is a fair way of putting together a non-</p>

<p style="text-align: center;">Page 201</p> <p>1 seemed that there was a, a situation which  2 maybe could've been controlled better.  3 DR. CARPENTER: You and the  4 speaker before talked about limited time of  5 discussion, it's been my experience that  6 that's really not the case. Do we ever have  7 a time limit on a particular chemical?  8 Didn't we discuss talc for the better part  9 of a day without being cut off and saying,  10 time is up? As long as new information was  11 being offered and presented, the Bo..., the  12 Board was listening to it and I, and I don't  13 know where this idea of a set time came  14 from.  15 DR. PICCIRILLO: Well,  16 actually Dr. Portier mentioned that this  17 morning that one of the changes was going  18 from a 5 minute time period to a 7 minute  19 time period.  20 DR. CARPENTER: Comments from  21 the public, but I'm talking about the review  22 process. Then you, you said the Naphthalene  23 committee was given an hour and a half to  24 consider all of this information and I  25 never, I don't remember having been on ...</p>	<p style="text-align: center;">Page 203</p> <p>1 subcommittee.  2 DR. GOLDMAN: Yes?  3 DR. PORTIER: I, I want to  4 make sure I clarify one issue. The chairman  5 for any given meeting of the NTP Board of  6 Scientific Counselors is just the chairman  7 for that meeting. There is no permanent  8 chairman for any of the meetings. We always  9 discuss the issue of who should be the  10 appropriate chairman and again, to make the  11 record straight here, for the Naphthalene  12 situation and to give you a little more  13 insight about how we run the Board of  14 Scientific Counselors RoC meeting, generally  15 the chair does not vote at the Board of  16 Scientific Counselors Report on Carcinogens  17 Meeting because they feel that if they were  18 going to vote on such an issue they become  19 an advocate and they can't properly control  20 the discussion between, in the Board to  21 bring out the, the issues that are being on.  22 They, they're concerned that they might be  23 somewhat biased. If any chairman for any  24 particular meeting does in fact express a  25 strong desire to enter into the debate on an</p>
<p style="text-align: center;">Page 202</p> <p>1 DR. PICCIRILLO: Well, no,  2 actually, I think what Dr. Le Huray said was  3 we had a, we ended up because of the timing  4 with the RG2 coming up, et cetera, we had a  5 period of about 10 days to do our, our  6 public comments. So...  7 DR. CARPENTER: But you  8 yourself during your presentation made a  9 comment about not having adequate time to  10 present to the Board because of, of  11 constraints. I mean that doesn't, that  12 doesn't make much sense to me.  13 DR. PICCIRILLO: But no,  14 that's...to the, yeah, this is to the  15 subcommittee itself. We had, we had a 7  16 minute time period in which to present  17 comments. We had submitted all of our, our  18 written comments prior to that and when  19 you've got that 7 minutes, it's very  20 difficult to determine which issues you want  21 to discuss. So the earlier comment that I  22 made was if we had seen other public  23 comments, and there were some concerns that  24 were raised, that would have influenced how  25 we spent our seven minutes before the</p>	<p style="text-align: center;">Page 204</p> <p>1 issue and to vote on that issue, we discuss  2 very carefully with that chairman whether or  3 not they should chair such a session because  4 we are very concerned that they might  5 control that session. So in this case, for  6 this particular session, this person was not  7 chair of the, of the particular meeting from  8 the start to finish. They stepped down for  9 the entire Naphthalene discussion. And you  10 will see that happen again, if it ever  11 occurs, simply because we, we feel the,  12 there's greater concern on our part for them  13 dominating the meeting as chairman than for  14 just entering into discussion with the rest  15 of the Board.  16 DR. GOLDMAN: Thank you for  17 that clarification. That sounds much more  18 appropriate. It's, it's good to hear that.  19 Other comments or questions?  20 DR. MOURE-ERASO: One last  21 comment. For the record, I find it curious  22 that you say that the person that made a  23 presentation did not have any expertise of  24 Naphthalene when one of the most respected  25 papers on Polycyclic Aromatic Hydrocarbons</p>

<p style="text-align: center;">Page 205</p> <p>1 as been, he, this person has been an author,  2 he's considered an authority on air pollution  3 and Polycyclic Aromatic Hydrocarbons and the  4 record is clear about this and to say that  5 he didn't have any expertise with  6 Naphthalene, I consider preposterous.  7 DR. PICCIRILLO: No, the  8 comment we made was, we did a, I, search of  9 his, his li..., of the literature published  10 by this particular individual and none of  11 the research was on Naphthalene per se.  12 DR. GOLDMAN: I think I'm  13 going to call a time out for this, okay.  14 They can take it outside or whatever,  15 but...seriously, I mean, we're... we really,  16 you know, we really appreciate your comments  17 and, on the process and I think that it, I  18 think that it's, it's quite helpful. Are  19 there other questions or comments for this  20 presenter? If not, I'm going to invite you  21 to sit down and, and, I've taken a little  22 bit of time here to summarize some of the  23 things I've heard and I thought maybe I  24 could kind of walk through that and then  25 open it up to make sure that, you know, that</p>	<p style="text-align: center;">Page 207</p> <p>1 the public actually makes the nominations but  2 in that selection process. Secondly, it was  3 raised that the scientific review process  4 perhaps could be improved. Now we've heard  5 that the NTP already has established a goal  6 of a 45 day period where the background  7 document is out there for review, to give an  8 opportunity to read it prior to the, to, for  9 everybody to read and maybe comment for the  10 RG1. However, there are some other ideas  11 that were put forward such as perhaps that  12 even more subject matter experts might be  13 involved, such as revising the background  14 document at each stage instead of appending  15 the changes that occur at each stage to the  16 document, whether you rewrite it or append  17 seems to be an issue. And even to as radical  18 of a proposal of getting rid of the RG1 and  19 RG2 processes in, in essence and replacing  20 them with an expert panel that's more like  21 the Panel for the CERHR which is changing,  22 but might still be seen by some as being a  23 preferable process to the RG1 and 2  24 processes. Some issues were raised about the  25 role of the Board of Scientific Counselors.</p>
<p style="text-align: center;">Page 206</p> <p>1 we have, that we've heard what everybody has  2 to say. Read what document? No, I'm not  3 going to read that document. We're, that, we  4 have virtually read that document into the  5 record. So, so some very, very quickly, very  6 quickly and I've kind of arranged these in  7 order of the, of the process. Obviously  8 very consistently during the day, I think  9 we've heard a lot of support overall for the  10 process of listing of carcinogens through the  11 concept that carcinogenicity is an attribute  12 that is in, intrinsic to a chemical, that  13 there's a weight of evidence approach that  14 should be applied and that the listing  15 process has public health value. Broadly, of  16 course that the public should be involved  17 early and as often as possible, that they  18 should be striving for full transparency and  19 more time somehow for discussions back and  20 forth, discussions throughout the process.  21 Specifically with the nominations process  22 starting at the beginning, there was a  23 question raised as to whether there was some  24 way to bring in public input into the  25 nominations process other than the fact that</p>	<p style="text-align: center;">Page 208</p> <p>1 I think some of those ended up in getting a  2 better understanding of how the BSC actually  3 works. But some of them had to do with  4 perhaps even more time for them to  5 deliberate on individual chemicals, perhaps  6 more time for people to give presentations  7 to them and have back and forth dialogue  8 with them. And of, to an extreme of perhaps  9 cutting the BSC out of the process and  10 having those interactions occur with the  11 expert panel, in essence that the expert  12 panel would encompass, you know, the RG1 and  13 2 and 3 processes all into one process,  14 which then I suppose a la CERHR would result  15 in something that the whole BSC would look  16 at as opposed to having an RoC subcommittee.  17 Some questions were raised about the next  18 step which is the role of the Executive  19 Committee for the National Toxicology  20 Program, you know, what is that thing and  21 what does it really do and I think from what  22 I've heard, comments ranged from either, you  23 know, better defining that role, to make it  24 more, more understandable to, to actually  25 eliminating the Executive Committee from the</p>

<p style="text-align: center;">Page 209</p> <p>1 process. I will say, you know, my two bits  2 in this having participated in various  3 elements of this is that, if there weren't  4 an Executive Committee to look at these  5 listings at this stage probably whoever is  6 directing the NIEHS would want to invent  7 one, because of just the need to vet these  8 decisions among all the part..., parties that  9 are a part of the National Toxicology  10 Program before taking them to the Secretary  11 in the Department of Health and Human  12 Services which is a big step, and there are  13 a lot of agencies in the department who care  14 about this, and those agencies need to  15 participate somehow and it is a, it is a  16 forum for that and I think that it would be  17 a real loss to the process to cut that out  18 and I think you'd end up with processes that  19 would be less out in the open and less  20 direct and probably less well informed by  21 the science without having the Executive  22 Committee, that's just my opinion. A lot of  23 questions came up with the interface between  24 this process and the Risk Management Process.  25 And it was pointed out that, you know, that</p>	<p style="text-align: center;">Page 211</p> <p>1 other comments were made throughout the day  2 about the issues of peer review and the  3 quality of, of the data, and again, just my  4 perspective, but I think it would be hard to  5 point to a process either in the government  6 or outside of the government where there's  7 been a higher level of peer review or a  8 higher degree of attention to the quality of  9 the information that goes into these reports.  10 And I, you know, I think that one would need  11 to proceed with great caution before changing  12 this process because it, it really has been  13 extraordinarily successful in being a very  14 high quality, very highly respected process.  15 And just to go back at, at the, in closing  16 to Bernie Goldstein's quote of what I said  17 in 1999 and I would still say, and that is  18 that this is a process that really has  19 focused on the science and bringing the  20 science into a weight of the evidence  21 approach to determining carcinogenicity. It's  22 not a process that's done for the sake of  23 process. And that, that it's probably  24 important to, to maintain. Obviously there  25 are some changes that are gonna need to be</p>
<p style="text-align: center;">Page 210</p> <p>1 there's even a state government in our  2 country, California, that has regulations  3 that directly incorporate the decisions, the  4 listings of the RoC into the regulatory  5 processes and that case for proposition 65,  6 that there is sometimes a public health duty  7 to put the listing into perspective and I  8 think that that's a place where I think  9 we've heard today that the NTP has taken  10 that into account and that that has happened  11 now a couple of times with pharmaceutical  12 agency, agents like Tamoxifen. But again, Dr.  13 Goldstein recommended publication of an  14 actual notice around the time of the, of the  15 NTP RoC listing, that would give, give  16 stronger signals about where the regulatory  17 agencies are going with that. And this is a  18 bit out of the purview of the NTP so far,  19 and, and again my two bits worth is that's  20 probably a good thing because one of the  21 things that has probably made this process  22 so successful over the years is that it is  23 not a regulatory process, that it's a  24 scientific process and it's not, not embedded  25 in a regulatory agency. Another, a number of</p>	<p style="text-align: center;">Page 212</p> <p>1 done but fundamentally the public health  2 value of this process needs to be honored in  3 the process of considering those changes. Are  4 there comments on, are there points that I  5 missed in that summary that need to be  6 brought out, other issues that, that people  7 heard that need to be brought forward? I'm  8 kind of opening it up for a bit of  9 discussion on that. I was going to call  10 on...  11 MR. KELLY: Would you like  12 me to come up or...?  13 DR. GOLDMAN: What?  14 MR. KELLY: Would you like me  15 to come up, or...  16 DR. GOLDMAN: No. Speak from  17 the mic is fine. Just...and identify  18 yourself.  19 MR. KELLY: Well, I've been  20 debating whether, there is an issue that has  21 not come up and it's, it's an important  22 issue I think, I've been debating whether to  23 even raise it because it's a bit of a can  24 of worms, has to do with the criteria for  25 listing a known human carcinogen. And the</p>

<p style="text-align: center;">Page 213</p> <p>1 clarification that's given for that, and  2 what's important to know is that that  3 clarification itself has been interpreted and  4 that when you consider the interpretation,  5 the clarification is not clear. Now what  6 the, what the criteria for known human  7 carcinogens says is you have to have  8 sufficient evidence from studies in humans to  9 establish a causal relationship. And then the  10 clarification says you need, this means you  11 need evidence from studies, actually it says  12 studies of humans rather than in humans. It  13 doesn't say sufficient evidence to establish  14 a causal relationship, it just says you need  15 evidence of studies of humans. But then it  16 adds a second paragraph that says there is a  17 summary paragraph that applies to both the  18 known and the reasonably anticipated criteria  19 that says consider all relevant data. Now  20 that, when that first came out, that was in  21 the Federal Register Notice in 1996, the all  22 relevant data language. We did not consider  23 it that important because relevant seemed to  24 refer to whatever was stated in the  25 criteria. If it's relevant for known, you</p>	<p style="text-align: center;">Page 215</p> <p>1 when you consider what happened there and  2 the interpretation that's been put on it,  3 and I'm sure this will come up again some  4 time in the future, that clarification can  5 be considered quite ambiguous. And I wanted  6 to point that out and it may be necessary to  7 make a clarification of the clarification.  8         DR. GOLDMAN: Well, I'm not  9 saying that I agree with you that it  10 actually says that, but I'm remembering now  11 that also Dr. Sass raised the question about  12 further defining the situations under which  13 human data other than epidemiologic data  14 would move a chemical up into the known  15 category and, and so I, I think that that's  16 another thing to add to the, the summary.  17 It's another issue and, and you're raising  18 it from a different direction. And, and the  19 need to have it be, if you may, equitable in  20 terms of those, you know, the kin..., the  21 data can cause you to down grade a chemical,  22 you know, and what can cause you to upgrade  23 it and I think if Dr. Sass were here, that's  24 the point that she would raise again, so I,  25 but, we, we should add that, that issue to</p>
<p style="text-align: center;">Page 214</p> <p>1 consider if it's relevant for what's said  2 reasonably anticipated cri..., listing  3 criteria, you consider that. Then when we  4 got to the dioxin listing, what happened was  5 there was a background document that said  6 the basis for the listing is a combination  7 of three things, human epidemiological  8 evidence, which the background document said  9 was not sufficient. It was limited. Animal  10 experimental evidence and in vitro  11 mechanistic data indicating that there was a  12 similarity between the mechanism for animals  13 and humans. So there was not sufficient  14 evidence from studies in humans but that  15 insufficienc..., insufficiency was compensated  16 for by animal and in vitro data. And that  17 was justified on the basis of this final  18 paragraph that says, we can consider any  19 relevant data. So in effect what it said is  20 you don't need sufficient evidence from  21 studies in humans. If you've got other  22 evidence that will compensate for  23 insufficient evidence, that's evidence in the  24 form of animal evidence or in vitro data  25 that all adds up to mechanistic data. So</p>	<p style="text-align: center;">Page 216</p> <p>1 the list because it seems that that is still  2 a live issue. Other, I know there were some  3 other hands... yes?  4         MS. FELTER: Susan Felter. I  5 have a couple of questions that evolve  6 around the issue of exposure and the first  7 one is, is really a question in terms of  8 whether a draft document is considered to be  9 adequate or not to move forward? The sense I  10 got from the discussion was focused more on  11 the, the toxicity side of it. But if I  12 understand the mandate correctly, the list of  13 substances that must be published is based  14 on those that are known or reasonably  15 anticipated and to which a significant number  16 of persons residing in the U.S. are exposed.  17 Is that better defined somewhere in terms  18 and, and has that ever been a basis for  19 deciding that something is, documentation is  20 not sufficient to move something forward  21 because there's inadequate information on the  22 exposure side or where do you find a better  23 description?  24         DR. GOLDMAN: So your  25 question is are there chemicals that have</p>

<p style="text-align: center;">Page 217</p> <p>1 been nominated that have not been moved  2 forward because of a judgment that there are  3 not a sufficient number of people in the  4 United States who are exposed to that  5 chemical? Does anybody from the program know?  6 Bill, can you, can you answer that question?  7 DR. JAMESON: Yes, as a  8 matter of fact there have been a couple of  9 chemicals that were listed in the first  10 Report on Carcinogens that were subsequently  11 removed from or de-listed from, from the  12 Report on Carcinogens because it was  13 determined that there was no longer any  14 human exposure to that material. So it  15 didn't, since there was no documented  16 exposure to those materials, they were  17 removed even though there was strong, strong  18 evidence that, that it was an animal  19 carcinogen.  20 DR. GOLDMAN: Which materials  21 and which chemicals?  22 DR. JAMESON: I'd, I'd have  23 to look at the report, I can't really...  24 DR. MOURE ERASO: I, I don't  25 remember a, the specific chemical but one</p>	<p style="text-align: center;">Page 219</p> <p>1 MS. FELTER: Yeah. I'd like  2 to continue with my question about exposure,  3 it goes back to I think the very first  4 opening statement that I've heard a couple  5 of times that cancer is intrinsic to a  6 chemical and I find that to be a very  7 interesting statement to not have  8 controversies surrounding it because as we  9 all know there is species specificity,  10 metabolic differences such that one strain,  11 one specie may be, it may be intrinsic to a  12 male rat but no one else, may be associated  13 with high doses and not low doses, example  14 of lung cancer associated with particle  15 overload. So a chemical that demonstrates  16 some tumorigenicity or carcinogenicity under  17 specific situations, to say that now it's an  18 intrinsic property of the chemical...if you  19 could address that a bit?  20 DR. GOLDMAN: Well, I  21 should've said the ability of the, of the  22 chemical to cause cancer in a human and I  23 think that that issue that you raised about  24 species differences has been addressed and  25 for quite some time actually in the way that</p>
<p style="text-align: center;">Page 218</p> <p>1 thing that, that concern me about that as  2 being one criteria is that there might be  3 the, the mistaken conclusion that that  4 particular chemical might not be a carcinogen  5 or it doesn't have cancer effects when in  6 reality the only criteria that was used, not  7 to have studied, is that there is no  8 exposures in the United States. Meaning that  9 if there are not exposures in the United  10 States, it doesn't matter if it's  11 carcinogenic or not, which, I found it a  12 little strange to say that and also probably  13 the language could be changed in a way that,  14 that to make it clear that nothing is being  15 said about the carcinogenic effect of the  16 chemical one way or another, simply it has  17 not been studied. Because there might be the  18 possibilities of having that confusion.  19 SPEAKER: Actually that  20 language can't be changed because that's the  21 law. I mean, that's the one we've always had  22 to deal with that issue, so...  23 DR. MOURE-ERASO: The  24 language stays basically.  25 DR. GOLDMAN: Go ahead.</p>	<p style="text-align: center;">Page 220</p> <p>1 data that are relevant to species that might  2 support the notion that the risks for humans  3 are different than risks for other species,  4 and has been incorporated and can be used,  5 has been used to downgrade the classification  6 of chemicals just as those same mechanistic  7 data in humans has sometimes been used to  8 upgrade the classification of a chemical. So,  9 that's, that's a part of this process.  10 MS. FELTER: May I? I, I  11 certainly agree, and I've seen many examples  12 of where that is true, certainly with the  13 species differences. What might be less  14 obvious to me and, and maybe the question of  15 genotoxicity to some extent comes in here is  16 the relevance of findings at higher doses  17 and not lower doses, where from the amount  18 of information that's available on the Report  19 on Carcinogens, again, with the goal being  20 public health, if there's no distinction made  21 between, you know, there's no dose  22 information included in here to indicate that  23 this chemical caused tumors in these  24 bioassays or these studies under these  25 conditions. It's simply a statement that it</p>

<p style="text-align: center;">Page 221</p> <p>1 caused tumors, boom. Which when you really  2 get into it from a toxicological perspective,  3 the implications of finding tumors under one  4 set of circumstances versus a different set  5 of circumstances in terms of the public  6 health implications are quite different. And  7 so has there been discussion about, and  8 maybe this goes beyond the scope of this,  9 this meeting.</p> <p>10 DR. GOLDMAN: No, it, it  11 really isn't. I mean, it's, it's, I think  12 that it's been an ongoing issue for probably  13 from the beginning of the program and the  14 way I would encapsulate the issue is, is it  15 okay that the Report on Carcinogens stops at  16 the hazard identification stage or should  17 they take a next step and do dose response  18 modeling, you know, come up with potencies  19 or, or come up with judgments about what  20 would be the appropriate dose response curve  21 and whether there might be a threshold and  22 so forth and so on. And at, at this point  23 in time there may be comments and I think  24 that the NTP folks can talk about that,  25 sometimes there are kind of comments about</p>	<p style="text-align: center;">Page 223</p> <p>1 about how do we present this material and to  2 what degree we might try other things, so I  3 think your comments are useful and we, we  4 will follow up on them. One of the reasons  5 we are now very vehement, I personally am  6 very vehement about the background documents  7 becoming sort of something that is  8 permanently there for people to look at and  9 review and see the comments and see the  10 process that went through is, it's actually  11 that that puts the, the report of, Report on  12 Carcinogens listing into context. It's really  13 hard in a short document that isn't the  14 entire book of the background document to  15 break it all down into something clear and  16 so the background document then plays a more  17 important role as do the comments on the  18 background documents and the minutes from the  19 meeting and the discussions of the votes, et  20 cetera. They all become something that  21 place the listing in context. And so we're  22 working on it, it's just not an easy issue.</p> <p>23 DR. BABBAGE: Yeah, Michael  24 Babbage from CPSC and I just wanted to  25 comment mostly on Dr. Goldstein's very</p>
<p style="text-align: center;">Page 222</p> <p>1 some of that, but once NTP makes the  2 judgment about classification, it's up to the  3 individual agencies to go through processes  4 of attempting to determine exposures, dose  5 response modeling and so forth and they  6 don't always do those things the same way to  7 even, even further complicate our lives. So  8 this has, this has been an ongoing issue  9 and, and it's been felt that by stopping  10 short of that, that it, it clearly draws the  11 line between this process and a risk  12 management process, but I think it's always  13 going to be an issue. Chris?</p> <p>14 DR. PORTIER: I just want to  15 make sure I, I'm understanding the comment,  16 now this is a comment on the RoC document  17 itself because obviously the background  18 documents spent a considerable amount of time  19 talking about the context of the observations  20 which are being reviewed and so the question  21 is to what degree does all of that  22 information then also get characterized into  23 the rather short listing that goes into the  24 Report on Carcinogens. And certainly every  25 re..., every report we visit the discussion</p>	<p style="text-align: center;">Page 224</p> <p>1 interesting proposal but also a little bit  2 on this last comment is, as it stands now  3 when a chemical is listed in the RoC, it  4 doesn't automatically trigger any regulatory  5 action in at least at CPSC, and when we do  6 evaluate potential hazards we of course  7 consider the RoC, IARC and the CERHR and,  8 and, and so on, but the, but our policy has  9 always been that we do our own evaluations  10 of everything from hazard ID to the, to the  11 risk and risk management, so really the, the  12 bottom line is that the bur..., the burden  13 is on us, on, on the regulatory agencies, or  14 in our case on us in particular to, to do  15 the, the, the, the next three steps of the  16 risk assessment essentially and to, and to  17 say whether a particular product in our  18 jurisdiction is a hazard and I mean, that's,  19 that's how it is and whether that should  20 change, I don't know, but that's the way,  21 that's how it is now.</p> <p>22 MR. KELLY: Of course, this,  23 this issue came up the last time we had a  24 public meeting on this in, in 1999; that is,  25 the issue of to what extent should the</p>



<p style="text-align: center;">Page 225</p> <p>1 listing information on the Report on  2 Carcinogens give some information about dose  3 or exposure and what is known about  4 carcinogenicity at a particular dose or  5 exposure, to what extent does that knowledge  6 depend on there being a certain level of  7 dose or exposure. Since that meeting we, we  8 do have new legislation and guidelines in  9 the form of the Data Quality Act and  10 guidelines and one of the requirements of  11 that is utility. Utility is defined as  12 utility to the intended, for the intended  13 purpose of the information product. We've  14 discussed this before when you go back to  15 the legislative history of the Report on  16 Carcinogens, it's very clear that Congress  17 intended that this report have utility for  18 individual Americans who would make choices  19 about their personal lifestyles and  20 exposures. And yet at the very, in the  21 introduction of the Report on the Carc...,  22 on Carcinogens currently it says that  23 there's nothing in the Report on Carcinogens  24 is intended to necessarily have any relevance  25 to the activities of people in their daily</p>	<p style="text-align: center;">Page 227</p> <p>1 called, pursue an alcoholic lifestyle. That  2 is, they're very heavy drinkers and have all  3 the other things associated with an alcoholic  4 lifestyle of just general dissipation, poor  5 diet, lack of exercise, you know, lack of  6 productive work, that sort of thing, possibly  7 low socioeconomic status which has been  8 correlated with increased risk of cancer, et  9 cetera. And yet the, so the implication of  10 this would be that the listing should say  11 that alcoholic beverages are known to cause  12 cancer among people who are heavy drinkers  13 or who are, who are, pursue an alcoholic  14 lifestyle, something like that. That was the  15 debate and yet they were instructed that  16 they could not insert that sort of language  17 in the Report on Carcinogens and they should  18 not even consider it as part of the  19 information product because the Report on  20 Carcinogens is only a hazard document,  21 doesn't consider risk. I think this issue  22 now with the new legislation...  23 DR. GOLDMAN: Bill, I don't  24 believe that's what the committee concluded  25 about the literature on alcohol, but, you</p>
<p style="text-align: center;">Page 226</p> <p>1 lives and there have been occasions when  2 the, there have been critical issues  3 regarding dose and exposure that have come  4 up with regard to specific listings and the  5 review panels, particularly the RoC  6 subcommittee have been instructed by RoC  7 staff that they should not consider dose or  8 exposure in making recommendations on the  9 listings. The one that comes most prominently  10 to mind as a good example of this is, which  11 I no longer have any interest in other than  12 my daily personal life as an individual  13 consumer is the consumption of alcoholic  14 beverages, in which there is considerable  15 evidence that very moderate intake of  16 alcoholic beverages is not carcinogenic and  17 is actually has health benefits, mainly in  18 the form of having to do with heart attack  19 and stroke. But the point is that, and this  20 was raised and debated considerably among the  21 RoC subcommittee members is that the evidence  22 we have that shows carcinogenicity with  23 alcoholic beverages; that is, what we were  24 already shown as known to be a carcinogen  25 only has to do with people who are what they</p>	<p style="text-align: center;">Page 228</p> <p>1 know, I might be wrong, it's been a few  2 years, but I don't think that that really  3 was their conclusion.  4 MR. KELLY: Oh, I don't know  5 about the conclusion, I'm talking about  6 the...  7 DR. GOLDMAN: That, that the  8 risk for cancer was only among these  9 subgroups that suffer from all these other  10 conditions. I don't think that that was  11 their conclusion. So I, you just have to be  12 careful here but...  13 MR. KELLY: I didn't say  14 they concluded that, I said...  15 DR. GOLDMAN: Yeah.  16 MR. KELLY: ...they were  17 debating that and then they were told that  18 that was not even appropriate to get into  19 and it was not necessary to debate. So they  20 never really reached a conclusion on it. But  21 it was an imp...it is an important point.  22 It, it comes up with, very prominently with  23 some other listings that are in the Report  24 on Carcinogens now. And I think it's going  25 to come up sometime with the new legislation</p>

<p style="text-align: center;">Page 229</p> <p>1 and guidelines and should probably be dealt  2 with at some point. And the usual response  3 is that they're, you know, we don't want to  4 get into quantitative risk assessment and  5 dose response curves and the usual, you  6 know, things that regulatory agencies get  7 into and I don't think you need to do that.  8 I think a, there are broad qualitative sort  9 of dose response or exposure statements that  10 can be made about some of these chemicals.  11 You know, for example, on some of them you  12 could say that, you know, cancer has only  13 been found, is, is only known to have  14 occurred in worker populations that were  15 exposed to extremely high doses as a result  16 of industrial accidents. You know, if that  17 were the, the case rather than in the  18 general population, rather than saying it's  19 giving the implication that it's known to  20 cause cancer among anybody who's exposed to  21 this. But again, I would like to point out  22 that we, we do have some new law on this  23 particular issue. There is very pertinent  24 legislative history. It's never really been  25 confronted adequately I believe by the</p>	<p style="text-align: center;">Page 231</p> <p>1 of priorities or is it a list or, or, or  2 how?  3 DR. GOLDMAN: I tried to put  4 it in the order of the process. So starting  5 from the nomination through the scientific  6 review through bringing it forward to the  7 Board of, so I tried to just put it in the,  8 in, in process order.  9 DR. MOURE-ERASO: Yeah,  10 because of, of, I probably will have, as, as  11 probably the people here in the panel have  12 different levels of, of reactions to these  13 statements that were presented, I mean, it  14 doesn't seem that, if the panel is going to  15 react to the issues that were presented,  16 there will be different opinions I assume.  17 DR. GOLDMAN: Perhaps it would  18 make sense at this stage to, you know, turn  19 to the members of the panel to see if you  20 have some feedback that you know, your own  21 reactions or, you know, further points that  22 you want to make to be sure to put them in  23 here now. There will also be a written  24 report and an opportunity in that to, you  25 know, after we've had a chance to ruminate</p>
<p style="text-align: center;">Page 230</p> <p>1 agency. I found the response to the public  2 meeting comments in 1999 to be very  3 dismissive in fact of this particular issue.  4 And since it has come up, I do feel that  5 this needs to be pointed out at this point.  6 Thank you.  7 DR. GOLDMAN: Okay, well, I  8 guess that's another issue to put up there,  9 but I, I should say that I have not yet  10 heard anything either here or elsewhere to  11 say that there's a determination that the  12 Data Quality Act applies to this process so,  13 I, but I think that your point about trying  14 to put the, put it in somehow in context  15 with exposure and I think it get backs to  16 the point that was made earlier needs to be,  17 you know, added as one of the, one of the  18 issues that was raised. Are there other  19 issues that need to be identified as coming  20 out from, from this meeting? Make sure that  21 we're not leaving anything out.  22 DR. MOURE-ERASO: I mean, I,  23 I, I read what you presented as the summary  24 of the issues and I, a little unclear about  25 it, the way that you presented this in order</p>	<p style="text-align: center;">Page 232</p> <p>1 further, to, to add to that. So, do you want  2 to lead off on that?  3 DR. MOURE-ERASO: Sure.  4 First of all I, I, I hear with some  5 trepidation the proposal of a re-  6 configuring the procedure, the process of,  7 of conducting the business of the NTP.  8 Specifically the, the recommendations of  9 basically eliminating the R, RG1 and RG2 and  10 the Board of Scientific Counselors. I believe  11 very strongly that the appropriate function  12 of the science in the federal prog..., in  13 the federal government that exists in, in  14 NTP is to take the responsibility of the  15 process of making decisions that eventually  16 are going to have big public health impacts.  17 And I absolutely reject the notion that we  18 can privatize this process. The expert panels  19 as it was described here constituted mostly  20 from the industry that supposedly is being  21 affected by these decisions is in my mind  22 absolutely not an improvement in the process,  23 but the opposite. I also believe that one of  24 the things that is also of great importance  25 in terms of having a fairness in the way</p>

<p style="text-align: center;">Page 233</p> <p>1 that mechanistic data are used as you  2 mentioned, what Dr. Sass mentioned that there  3 is a need to have explicit descriptions of  4 how mechanistic data can affect a process,  5 upwards and downwards and that that should  6 be made specific in the language, and not  7 only put an example of how things could be  8 de-listed and know how things could be  9 changed from one classification to another.  10 And specifically to, to maximize the  11 appropriate use of mechanistic data, to  12 properly inform people of, especially  13 properly inform exposed people what to expect  14 in effects of carcinogenicity.  15 DR. DELZELL: I'm sure that  16 each of us on the panel has a slightly  17 different view of what's transpired and what  18 our reactions are. I, I do, I have heard  19 some very specific recommendations for  20 clarifying and improving the process, and I  21 think those need to be carefully considered.  22 I am not as willing to, not dismiss but, but  23 have a negative reaction to the idea that  24 the whole process be reviewed and perhaps  25 changed. I think that it is very good to</p>	<p style="text-align: center;">Page 235</p> <p>1 minimal. And I think that the Board gets an  2 understanding of that issue, I think that  3 the industry that's being affected and  4 impacted by those decisions understand that  5 issue, but I don't think that in general  6 very many other people really do, that a lot  7 of times with, when you're, when you're  8 dealing with state agencies in particular, if  9 you see a chemical listed as a carcinogen,  10 it's an immediate problem, and that's, that's  11 clearly not true. And I think there, there,  12 there should be a mechanism whereby some of  13 those reservations can be expressed and I've  14 done this in, in RoC meetings as have a  15 num..., number of other people. It's in my  16 understanding not part of the mechanism now,  17 but I would really like to see it part of  18 the mechanism whereby a description says, you  19 know, it's, the apparent risks from this  20 exposure to this chemical are small, but  21 this is a hazard identification process and  22 I think that get, gets lost a lot of the  23 time in discussions is that, is that this is  24 limited to hazard identification and I think  25 that's a real issue that's going to keep</p>
<p style="text-align: center;">Page 234</p> <p>1 consider changes, particularly in light of  2 the very sweeping changes that we see taking  3 place in science or are about to take place.  4 I, I do feel that the peer review process  5 can be improved. I'm less sure of the  6 specific mechanism for improving the peer  7 review process. The, the other thing that  8 we've heard quite a bit about today is the,  9 the need to improve the exchange with the,  10 between the public and the peer review  11 process. And I'm sure that that can be  12 improved also.  13 DR. CARPENTER: Yeah, I agree  14 that, I think that there is a fundamental  15 misunderstanding about what the peer review  16 process is because we encounter the same  17 arguments. A number of the discussions that  18 have taken place today take place in the RoC  19 meetings themselves. Particularly questions  20 about exposure and the idea of listing a  21 chemical, realistically exposures will never  22 occur to humans, so they're, they're, or  23 they're at least not likely to occur. So  24 that the actual risk that's being posed by  25 these chemicals in everyday life is, is</p>	<p style="text-align: center;">Page 236</p> <p>1 coming up until it gets addressed formally.  2 DR. GOLDMAN: Mark?  3 DR. TORAASON: I think, there  4 was a lot of discussion about the document,  5 I'm not sure that, that the review documents  6 met the same, serve the same purpose as the  7 reproductive health effects documents. I  8 mean, the documents that the NTP uses are to  9 facilitate the review by the Board of  10 Scientific Counselors and the different  11 regroup, review groups, and over the years  12 those documents have been improved and it's  13 sort of coming back to bite the NTP because  14 the better they get, the more people want  15 them to be better, the more they want the  16 process to be better. And if that's an  17 int., if that's the intent, to produce an,  18 a comprehensive document, then some of the  19 recommendations we heard were great. But  20 perhaps maybe the focus should be on the  21 writing that appears in the Report on  22 Carcinogens because that's the thing that  23 really goes forward, that's the thing that  24 most people read. And that isn't given a  25 review process that I'm aware of, it just</p>

<p style="text-align: center;">Page 237</p> <p>1 sort of appears. So maybe that, that could                  2 be a place of focus. The other comment I, I                  3 have, that I think there, there are some                  4 really good recommendations about the time                  5 allowed, I heard some things from a                  6 perspective that I hadn't noticed before and                  7 one particular point is, I've attended a lot                  8 of meetings and it's invariably there was                  9 plenty of time for everybody to say what                  10 they want. There were a couple of meetings                  11 where people were cut short and I was                  12 thinking, what's this concern about time? But                  13 I, it did dawn on me, when you're told ahead                  14 of time you only have 7 minutes, you only                  15 prepare 7 minutes. I guess if you're savvy                  16 about what goes on in the meetings, you can                  17 prepare for 30 minutes and 40 minutes, so...                  18 And the other point was what Hillary made                  19 about, oh, we get these documents two months                  20 ahead of time, that's true, but I'm more                  21 sympathetic toward the people that want to                  22 respond to that. They have two months, they                  23 have to write it and then we get it in at                  24 the last moment, and then they feel that                  25 because reviewers got it at the last moment</p>	<p style="text-align: center;">Page 239</p> <p>1 DR. JAMESON: Yeah, just,                  2 just for the record, I'd like to identify                  3 the fact that we received additional written                  4 comments for this process meeting from                  5 individuals who could not attend. We've                  6 received these, these, the written comments                  7 and they were placed on the web as part of                  8 the public record for this meeting, but, but                  9 for, for the purpose of the record I'd like                  10 to identify that Sam Cohen of the University                  11 of Nebraska Medical Center, Neil King of                  12 Wilmer, Cutler, Pickering on behalf of the                  13 Nickel Production Environmental Research                  14 Association and Inco United States submitted                  15 comments, I'm sorry, Samuel Cohen submitted                  16 comments, Mr. King submitted comments, Wulf                  17 Utian of the North American Menopause Society                  18 submitted comments, Dr. Lawrence Robinson                  19 from the Color Pigments Manufacturing                  20 Association and James Enstrom from the                  21 University of California at Los Angeles                  22 submitted written comments. These were made                  23 available on the web, distributed to the                  24 panel and, and copies are also available                  25 outside.</p>
<p style="text-align: center;">Page 238</p> <p>1 they didn't get much of a chance. And I                  2 think so, even though I may get the document                  3 two months ahead of time which gives me                  4 plenty of time, not plenty of time, but                  5 adequate time to review, I'm realizing that                  6 there's also this other gap where people                  7 want to not only review it, they want to                  8 comment on it and they want me to have time                  9 to review what they say and maybe there is                  10 need, a need for a little more time there.                  11 DR. GOLDMAN: Excellent. And                  12 I think those last points are really points                  13 that should have been in my summary too,                  14 that, the re..., the idea of the review of                  15 the actual listing was a very interesting                  16 idea, I don't know exactly how you would do                  17 that, but there might be some way at least,                  18 you know, minus the judgment call, the                  19 description of the substance and the                  20 description of the toxicology, maybe that                  21 could be vetted fairly early, that's kind of                  22 an interesting idea. What I want to do now                  23 is turn to first Bill Jameson, he has some                  24 additional information for the record to give                  25 us and then ask Chris Portier to sum up.</p>	<p style="text-align: center;">Page 240</p> <p>1 DR. GOLDMAN: Thank you.                  2 DR. MOURE-ERASO: Dr.                  3 Jameson, there were some other things, there                  4 were some other things that were distributed                  5 here that were in part of the written record                  6 too...that will appear in the, in the final                  7 list?                  8 DR. JAMESON: Yes, yes,                  9 every, everything that was distributed from,                  10 from individuals who were, were scheduled to                  11 make presentations but were unable to and                  12 submitted their, their, their comments, those                  13 will also be made part of the record, yes.                  14 DR. PORTIER: I thank you                  15 all, Lynn, thank you very much for running a                  16 very interesting meeting and I, I actually                  17 look forward to the written part of this,                  18 bulleted it's good enough, I, I think we've                  19 got a lot of the points down that you                  20 brought forth. I'm going to clar..., I was,                  21 I've been debating whether to clarify an                  22 issue or not, but I, I can't let it go.                  23 Sometimes at public meetings things are said                  24 that get carried away and everyone leaves                  25 with the impression that's an incorrect</p>

<p style="text-align: center;">Page 241</p> <p>1 impression. So I'm going to pick on alcohol.  2 Because I really want to make it clear that  3 we do go to some degree of effort to try to  4 clarify our listings. I'm just going to read  5 one part from the alcohol listings, so, so  6 you can all go back and do your homework and  7 read and look at this. The second sentence  8 on the alcohol listing, the first sentence  9 clearly says, alcohol is a known human  10 carcinogen, according to our review of the  11 second sentence it says, studies indicate  12 that the risk of cancer is most pronounced  13 among smokers and at the highest levels of  14 consumption. I just want to clear, make it  15 clear that the, we do take into account the  16 issues that have been debated, the last part  17 of this, we do draw a line about where we're  18 going with dose response. In some of our  19 presentation there are issues that clearly  20 become very difficult issues that being an  21 expert in dose response and having spent 25  22 years of my life doing research on it, I  23 recognize some of the difficulties involved  24 in making decisions about what level  25 constitutes concern and what level does not</p>	<p style="text-align: center;">Page 243</p> <p>1 recommendation for a listing or non-listing  2 in the Report on Carcinogens. It's very  3 important we get that record very clear and  4 there's been some excellent suggestions here  5 on how to improve that record and improve  6 that debate. And I think we'll be looking  7 very carefully at how we do that. Again,  8 thank you all very much. I want to thank Dr.  9 Jameson and his staff not only for this  10 meeting but for years and years and years of  11 effort in putting together the Report on  12 Carcinogens, creating over the course of, 20  13 years of your career now, Bill? Over 20  14 years of process that I think is second to  15 none, not only in the U.S. government but in  16 the world. I think we've got a process that  17 is more open than any other decision process  18 for hazard I've ever seen and I've been  19 involved in a lot and we continue to try to  20 make the, make it better and I think it's  21 Bill and his staff that have taken us there  22 and I want to thank them very much. Thank  23 you all for being here. Thank you very much  24 for your comments. Again, if you have any  25 additional comments or anything else you'd</p>
<p style="text-align: center;">Page 242</p> <p>1 constitute concern. We're always willing to  2 consider where we're going with that but I  3 really don't see us ever, unless legally  4 required by Congress directly, going into the  5 issue of setting thresholds and standards and  6 things like that. It's just not the mandate  7 of the Report on Carcinogens and I believe,  8 my interpretation and my counsel will correct  9 me at some point is that that would take us  10 way beyond the mandate of the law for the  11 Report on Carcinogens and I just don't see  12 us going there. But the comments have been  13 very stimulating, there's a lot of things I  14 will take back to staff and look at very  15 carefully. We, we always look at how we list  16 the criteria and we are constantly trying to  17 redo that. We always very carefully look at  18 how much time we've given you in, in  19 providing additional comment to us up front  20 because we really do believe it's the  21 debate, both the debate that occurs at the  22 public meetings, the debate that occurs at  23 the government meetings and the debate that  24 occurs in the written documents that drive  25 where the, the program is going to go in</p>	<p style="text-align: center;">Page 244</p> <p>1 like us to consider, we are always open to  2 comments even after the close of this  3 meeting. Contact Dr. Jameson, Dr. Wolfe and  4 get them to us. And again, Lynn, thank you  5 very much and I'll turn it back over to you  6 now.</p> <p>7 DR. GOLDMAN: Well, and I  8 think all of our thanks to Bill Jameson and  9 the NTP staff for the work that they do on  10 the Report. Obviously, it's something we all  11 appreciate and that's why people are here to  12 try to help make it better.</p> <p>13 DR. JAMESON: If I may, I'd  14 like to recognize Anna Sabella of my staff  15 who worked very hard for all the logistics  16 of this meeting, and, and has done an  17 excellent job in getting everything and I...</p> <p>18 DR. GOLDMAN: Thank you.</p> <p>19 DR. JAMESON: ... I'd like  20 to thank, publicly thank Anna Lee. Thank  21 you.</p> <p>22 DR. GOLDMAN: Okay,  23 adjourned.  24 (WHEREUPON, the Meeting was concluded at 3:16  25 p.m.)</p>

Page 245

CAPTION

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24

The Meeting in the matter, on the date, and at the time and place set out on the title page hereof.

It was requested that the Meeting be taken by the reporter and that the same be reduced to typewritten form.