

ATTENDANCE

GOVERNMENTAL STATE LIAISONS

Laura Chenet-Leonard, Oregon
Ellen Haars, Washington
Elke Shaw-Tulloch, Idaho

TRIBAL SERVICES PROGRAM

Martha Holliday, HHIN

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

Michael Brooks
Rita Ford
Cate McKinney
Greg Thomas
Marilyn Palmer
Gail Williams

CENTERS FOR DISEASE CONTROL AND PREVENTION

Van Chase, Seattle

AUDIENCE MEMBERS

Key A. Ander
Jules F. Bittner, M.D.
Cynthia Harris, HHIN
Bea Kelleigh
Wayne Kinney, U.S. Senator Ron Wyden
Sarah Nicendo, HHES
Jerry Schnell, OHSU
Chris Townley, HHIN

SPEAKERS

Steven Ahrenholz, Ph.D., NIOSH
Scott Davis, Ph.D., FHCRC (HTDS)
Kenneth J. Kopecky, Ph.D., FHCRC (HTDS)
Roger Briggs, DOE-RL
Steven Simon, NAS

AGENDA

THURSDAY, MAY 13th, 1999

Announcements, Introductions and Agenda Review
Review and Approve February Meeting Transcript,
February Action Item List, Agency Response Letters

Briefing on Recent Local Media Coverage of 25 Hanford-related issues
By: Marlene Nesary

ICHHP Update:
By: Rachel Moses

Announcement and Discussion of HHES Participation in NRC Meeting, Spokane, Washington on
June 19, 1999
By: Steve Simon

ATSDR Update:
By: Greg Thomas

CDC Update:
By: Van Chase

IDA Update:
By: Ellen Haars

DOE Update:
By: Roger Briggs

NIOSH - Lung Cancer Case Control Draft Protocol, Leukemia Case Control Study, Carpenters
Mortality Study
By: Steven Ahrenholz, Ph.D.

QUESTION AND ANSWER SESSION
Hanford Thyroid Disease Study Researchers
By: Scott Davis, Ph.D., FHCRC
By: Kenneth Kopecky, Ph.D., FHCRC

PUBLIC COMMENT

PRESENTATION/DISCUSSION: Native American Risk Scenario
By: Stuart Harris

Regular Work Group Agenda, plus Review of 164 HHES Balance in Representation, and
Discussion of the National Evaluation

AGENDA

FRIDAY, MAY 14TH, 1999

Announcements and Discussion of Recommendation
Regarding next HHES Chairperson

Public Health Activities Work Group Report
By: Jude Van Buren

Studies Work Group Report
By: Judith Jurji

PUBLIC COMMENT

Outreach Work Group Report
By: Marlene Nesary
By: Marcia Wood

Public Health Assessments Work Group Report
By: Trisha Pritikin

PUBLIC COMMENT

DISCUSSION: HHES Balance in Representation HHES Evaluation Process Recommendation
Regarding Next Chair

Final Subcommittee Housekeeping

PENDLETON, OREGON, THURSDAY, MAY 13, 1999

DR. VAN BUREN: Good morning, and welcome to the Hanford Health Effects Subcommittee. This is the second meeting of this group in 1999. And for the audience, we are a federally appointed group of people that represent the diverse opinions about Hanford and radiation health effects, and we are very diverse. We often disagree, and disagreement, we believe, is a very good thing. I'd like to welcome you all to the cultural institute here. I'm not going to try to say the name, but it's a beautiful institute in a beautiful setting, and we appreciate the opportunity to be here. If you all remember, it was the decision of this group to try to find a facility within a tribal reservation of one of the nine tribes, and this was the setting that best fit our needs, and I think we're real fortunate to be here. I also just want to state that the meeting last night that we were going to have regarding cultural sensitivity had to be canceled because of the death of a tribal elder. And we're looking forward to having that session rescheduled sometime later in the year. Okay. Are there any other last-minute announcements that need to be stated for the good of the order, before we start our introductions?

MS. CAMPBELL: Just for the benefit of those who may not be aware, Lynne Stenbridge will be here today. She's driving in this morning and will be a little late, so Jude is filling in as acting chair through the first break. I just wanted to make that announcement.

DR. VAN BUREN: Great, thank you. Our normal recorder is ill for this meeting, so we do have a substitute recorder, but she is driving in as we speak. The meeting is going to be taped, the entire meeting, but because we have a new recorder who doesn't know us and our faces, it will be very important for each of us to remember to state our names before we speak, and to check your minutes at the end of this meeting when you receive them, to make sure that, you know, your name is indeed in front of what you said. So let's start our introductions. What I'd like is for each person to state their name and the group they represent, and anything about themselves that they would like the group to know. First of all, my name is Jude Van Buren. I am subbing for the chair just until the break today. I'm a citizen of Washington state, I grew up in the Tri-Cities, have been educated in the field of environmental health, and am a faculty member at the Evergreen State College, and currently on a sabbatical leave. I represent the environmental health community and interested members who are in the scientific arena. So if we can perhaps pass to Jo Marie?

MS. TESSMAN: Good morning. My name is Jo Marie Tessman. I work for the Confederated Tribes of the Umatilla Indian Reservation. On behalf of my people, I welcome you to the Tamastlikt Cultural Institute. We're really happy that you could be here. I'm sorry that we were unable to put on our presentation last night, but as she mentioned earlier, we did have a death in our tribal elder community earlier this week. And so out of respect, and the fact that Armando was involved in other activities, we have chosen to reschedule that. We'll deal with that later, July or whenever, however that works. It is on the agenda afterwards, when we finish, that we'll have a short break and then a tour of the museum. We're having people stay over so they're here for you to take you on a tour. It normally takes about three hours if you've got all the time in the world, and we're going to do it in an hour. So I look forward to that and, if you have any questions, let me know and I'll be happy to answer them or find somebody who can. Thank you.

MR. SQUEOCHS: Good morning. Moses Squeochs from the Fourteen Confederated Bands of the Yakama Nation, Interior Mid-Columbia River Basin. It's a pleasure to be here on behalf of the Yakama Nation. The interest of the Yakama Nation obviously, like so many other people, is environmental quality directly related to health and so many other resources throughout the region. I am a member of the Yakama Nation, as well as an employee. I work within the Yakama Nation's Division of Natural Resources, primarily involved with the development of two programs that I feel are very crucial to the Yakama Nation. That's the Yakama Nation's environmental program and also their water program. It's a pleasure to be here, and I hope to gain something from it. I'm encouraged that the tribes are being looked to and recognized and allowed participation through -- right now we're trying to get situated with ATSDR on what they call a capacity building effort. Thank you.

MS. QUEAHPAMA: Good morning, I'm Madeline Queahpama-Spino. I'm from the Warm Springs Confederated Tribes. I have been working with the HEDR program prior to this, and have been involved with this since 1990. I want to welcome you all to the Umatilla Reservation. I think it's good that ATSDR brought the HHES to one of the reservations. It would be nice if you could all come to Warm Springs.

MS. SHAW-TULLOCH: I'm Elke Shaw-Tulloch with the Idaho Division of Health, and I'm also the State Coordinator for the Hanford Health Information Network, and also the Hanford Individual Dose Assessment Project.

MS. CHENET-LEONARD: And I'm Laura Chenet-Leonard with the Oregon Health Division, Project Coordinator for the Hanford Health Information Network, and the Hanford Individual Dose Assessment Project.

MS. PRITIKIN: I'm Trisha Pritikin. I was born and raised in Richland, Washington, and I now live in Berkeley, California.

MS. WOOD: Good morning. I'm Marcia Wood. I'm from Wenatchee, and I originally grew up in Soap Lake, Ephrata, kind of in the shadow of Hanford. And what I represent is, in a sense, the downwind portion of those folks that lived there and grew up at the same time that I was living there. And I am extremely interested in the environmental health aspects of Hanford, and this has brought me to this place. Thank you.

MS. WALKER: Good morning, I'm Beverly Walker. I live in Gresham, Oregon. I was born in Portland in 1941. I grew up, I moved to Pasco, Washington in 1945, in August. That was not a good time to go to Pasco, and so I am a downwinder.

MS. NESARY: Marlene Nesary. I'm living in Richland now, grew up in the Tri-Cities, spent 30 years away, and have come back around again. Most of my career has been as a writer and a teacher, and I'm working at the welfare office now.

MS. KIER: My name is Linda Kier. I was born just down the hill in Pendleton and spent the first ten years of my life here. It's wonderful to be back and to see some wonderful changes on the reservation. It's good to be here, downwinder from Eastern Oregon.

DR. KAPLAN: My name is Louise Kaplan. I'm an assistant professor in the school of nursing at Pacific Lutheran University, and I've been involved in Hanford issues for about ten years now.

MS. JURJI: Good morning. I'm Judith Jurji, and I represent the Hanford Downwinders Coalition, which is made up of people that were exposed to the Hanford releases during its early years. I grew up in the Tri-Cities also, and have been an activist for about ten years, and currently live in Seattle, Washington.

MR. GARCIA: Buenos dias. My name is Ricardo Garcia. I live in Wapato, Washington. I'm the station manager of Public Radio KDNA in Granger, Spanish Language Radio.

DR. FISHER: Good morning, everyone. My name is Darrell Fisher. I'm a medical physicist. I'm employed by Pacific Northwest National Laboratory. I have 25 years of experience specializing in the health effects of radionuclides in the body and the health effects of radiation. And I'm a member of the Society of Nuclear Medicine, the Health Physics Society, and the American Nuclear Society.

DR. CEMBER: Good morning. Is this on? My name is Herman Cember. I was born in ^ (inaudible), New York, and I currently reside in Lafayette, Louisiana. I am a professor emeritus of environmental health engineering from Northwestern University, and I'm currently a visiting professor at Purdue. I consider myself a public health person whose specialties are health physics, which deals with radiation safety; and industrial hygiene, which deals with the prevention of occupationally based diseases. I am not an activist. What I'm interested in is finding out what's going on; if there are errors that have been made, how to correct them, and how to prevent errors from arising in the future. This is environmentally based errors I'm talking about. Thank you very much.

DR. CALDWELL: I'm Glyn Caldwell. I'm a physician epidemiologist and a Kentucky state epidemiologist. I guess my claim to fame is that I've been involved in this problem since 1986 with the first release of the information from Hanford, those first 19,000 documents. I was on the Hanford Health Effects Review Committee in September of '86, then on the Hanford Environmental Reconstruction Project, and I'm a member of the HHES.

DR. BARTH: I'm Del Barth, currently a professor emeritus at UNLV in Las Vegas, Nevada. I have been involved with radiological health matters for more years than I would like to tell you, starting off with the Army and then going to the U.S. Public Health Service, and then to the Environmental Protection Agency.

MR. ANDERSON: I'm Henry Anderson. I'm with the Wisconsin Department of Health and Family Services. I'm a chief medical officer there. My background is occupational and environmental health. I'm a physician epidemiologist. I have been involved in doing multiple population based studies and, like Glyn, was involved in the very early planning stages for the

thyroid study here, looking at what types of medical tests were appropriate. Oh, and I'm a member of HHES.

MS. CAMPBELL: Good morning. My name is Leslie Campbell. I am the Executive Secretary for this committee. I am from the Agency for Toxic Substances and Disease Registry in Atlanta, Georgia.

DR. VAN BUREN: Could we go around again, just for the couple of people that we missed?

MS. MOSES: My name is Rachel Moses. I'm with the Colville Confederated Tribes of Washington State, and also the chairperson of the Intertribal Council on Hanford Health Effects, the ICHHP committee. And the tribe has a cooperative agreement with ATSDR, the continuing of a five-year cooperative agreement.

MR. STANFILL: Good morning, I'm John Stanfill with the Nez Perce Tribe's Environmental Health Department.

DR. VAN BUREN: Now I would like for members of the audience and agencies to please stand, and either go to the mike or speak loudly, so your name can be heard on the tape.

MS. CAMPBELL: They're going to have to go to the mike for the tape.

DR. VAN BUREN: You're going to have to go to the mike. Thank you.

MS. WILLIAMS: Good morning. I'm Gail Williams. I'm from the Agency of Toxic Substances and Disease Registry. I work in the Division of Health Education, and I'm currently going to be working with HHIN.

MS. MCKINNEY: I'm Kate McKinney, and I'm also with the Agency for Toxic Substances and Disease Registry. I'm in Community Involvement Branch, and my role has to do with the outreach for the Public Health Assessment coming up in the fall.

MS. KELLEIGH: Good morning. My name is Bea Kelleigh, and I'm the Director of the Hanford Health Information Network Resource Center.

MR. BRIGGS: Good morning. My name is Roger Briggs. I am with the Department of Energy in Richland, Washington. I am a point of contact for Hanford health studies. And I do have -- most of my working life I have been in public health. I actually began working in Whitman County, just east of Hanford, not knowing much about Hanford at that time many years ago. I don't think anybody else did, either. But I am now an industrial hygienist, but I feel like I have some background to offer, and hopefully I'll be a facilitator for things that need to be done through the Department of Energy. And I hope to serve a useful role in informing my management what some of the issues and needs are of the Hanford Health Effects Subcommittee and the Intertribal Council. Thank you.

MS. HOLLIDAY: Good morning. My name is Martha Holliday. I'm with the Northwest Portland Area Indian Health Board, HHIN Tribal Service Program.

MR. SCHNELL: I'm Jerry Schnell, and I work at Oregon Health Sciences University in Portland, Oregon.

MS. TOWNLEY: Good morning. I'm Chris Townley, and I'm the project manager with the Hanford Health Information Network.

MR. THOMAS: Good morning. My name is Greg Thomas. I'm with ATSDR also, the Seattle, Washington Regional Office.

MS. CHASE: Good morning. I am Van Chase with CDC in Seattle. I am a member of the Athabascan Tribe of Interior Alaska, and it feels good to be on Indian land.

DR. BITTNER: I'm Dr. Jules Bittner, retired internist. I practiced here in Pendleton for 45 years. I'm a member of the Hanford Health Information Network of Oregon.

DR. AHRENHOLZ: Good morning. I'm Steve Ahrenholz. I'm the Assistant Branch Chief with NIOSH's Health-Related Research Branch in Cincinnati, Ohio, and I'm the NIOSH representative here this week.

MS. FORD: Good morning. I'm Rita Ford. I work with ATSDR in Atlanta, Georgia, on the team that's preparing the Public Health Assessment.

MR. BROOKS: Good morning. I'm Mike Brooks with ATSDR in Atlanta. I'm a health physicist working on the health assessment.

DR. VAN BUREN: I think there was one more member of the public. Would you like to introduce yourself?

DR. SIMON: Hi, I'm Dr. Steve Simon representing the National Academy of Sciences.

DR. VAN BUREN: And Buck?

MR. CAMERON: I'm Buck Cameron, Center to Protect Workers' Rights.

DR. VAN BUREN: Great. If you could all please take a look at our agenda -- and if members of the public did not receive one, there is one on the back table outside the door -- and just to verify that this is what we have agreed upon for the next two days, with an adjournment at 4:00 on Friday. Okay. Are there any corrections for the minutes from the February meeting in Kennewick? Trisha?

MS. PRITIKIN: I promised Nancy Schwartz, who isn't here today, that I'd pass a message on to everyone from her. When I faxed over my corrections, she said, "How come nobody's sending me any corrections anymore?" And she wanted to know if folks are still reading through the minutes.

So I promised I'd bring that up for everyone, to remind them to please look through the minutes, or else it will stand as written. And she's not well today, so she couldn't be here, but I promised her I would pass that message on.

DR. VAN BUREN: Thank you. Linda?

MS. KIER: Are we done with agenda additions or corrections? I wasn't sure if you called for that.

DR. VAN BUREN: I did call for it, and I didn't hear any discussion. Do you have a discussion?

MS. KIER: I was a little bit puzzled when I tried to reconcile our outline, the last couple of pages, with our action item list. I'm speaking of, on the action items on our outline, pages 6 and 7; and then on our action item list -- and I'm assuming action items come under agenda, correct? Is that where we are at on the -- would we have a separate space to discuss those?

MS. CAMPBELL: Yes.

MS. KIER: Okay. I'll wait for that then.

DR. VAN BUREN: Thank you. I read through the minutes, because I wasn't at the last meeting, and I think there was some -- just because I think I know people and their comments, there was some switching of names. So be sure that your name is in front of what you said and not someone else. Okay. If there are no major corrections -- and please go through your minutes. I don't know if we can give our minutes corrections to the replacement for Nancy?

MS. CAMPBELL: My understanding is Nancy is still collecting the comments, and she will still be addressing them. She just could not travel for this meeting. But you need to get those comments to her very, very soon, because we will be finalizing the minutes.

DR. VAN BUREN: Linda?

MS. KIER: I did speak with Nancy last week just before the deadline. And she was wondering if possibly we just really need to do one copy, and not have to go through a corrections procedure. I mean, obviously there's going to be a few errors, and there were a few small things that I wrote to her about -- for example, Louise Kaplan and my name had been interchanged on some items -- but nothing of great major importance. And she was wondering if possibly it wouldn't -- I mean, the content was there, it was just the names had been switched, which is no big deal. Or maybe it is. Sorry, Louise. Anyway, she was wondering if possibly we could streamline the process and save money by just having one copy come out and doing corrections as we are now, but not doing the two-copy process which we now have, a draft and a final.

MS. CAMPBELL: Linda, I believe that's something that we will work with Nancy on, but I think for continuity in minutes, and the fact that these do become records that go into the repositories, we want them to be final minutes. I don't see any way around having two sets.

MS. KIER: Okay.

DR. VAN BUREN: Okay. The next thing is to look at our action items and to see if there are any corrections or comments regarding the action items. Buck?

MR. CAMERON: I'm sorry I came in late, but I need to back up on two agenda items. I had asked Lynne for a large block of time to talk about the assessment evaluation process, and I had asked for two hours and was told I could have one hour. And I see I have half an hour, with balance in representation, evaluation and recommendations regarding the next chairman. I don't feel I can go to Atlanta and spend two days representing this committee in an evaluation process that we have found problematic, without the opportunity to fully discuss it with this group.

DR. VAN BUREN: Okay, Buck. We will work on that and see what we can do this afternoon. Yes, Linda?

MS. KIER: I'm glad Buck brought that up, because I kind of wanted to second what he said, and I wanted to take it, at some point, to comment that lately we've been losing our quorum when we get to these rather important final items that usually set the stage for our scheduling and procedures for the following meetings for our planning process. And we tend to lose our quorum about 3:00 or 3:30. I'm not sure, given the problem of plane schedules and so forth, I realize it's not easy for our chair and our Designated Federal Official to cope with all these things, but yet it's disturbing to me and it -- I don't quite know how to address this or what what topic under the agenda that this should be addressed. If we wait until the end of the meeting, as I say, if we want to have any action items or changes or votes, it seems like we just don't have the quorum to do that, and then people aren't informed.

MS. CAMPBELL: I just need to remind everybody -- and myself -- to identify who you are as you talk into the mike. Linda, this has been a concern that's been expressed. All I can do is restate that there is a commitment of the membership here to be here for the time that the agenda is set. And we certainly hope that we don't run into a quorum issue as we did at the last meeting, but we will -- all I can say is, stress to the people that are here that this is a two-day commitment. And it's hard to find the right time, everything is important, everything on the agenda, I think, people would say would be important. And moving those discussions to an earlier time still leaves something else that's important to be discussed during that time point. So we're doing the best we can, and just everybody try to recognize your need to be here.

DR. VAN BUREN: Buck, is your card down? Okay. There were, I think, two other people who joined the table in the last fifteen minutes. Could you please identify yourselves? Thank you.

MR. WYNECOOP: David Wynecoop, Spokane Tribe.

SPEAKER: (Inaudible.)

DR. VAN BUREN: Thank you. Okay. Are there any further comments about the action item list, or the response from the agencies to those action items? Trisha?

MS. PRITIKIN: I just wanted to clarify, this is the time on the agenda when, if we have a question about a specific action item, we can raise that question right now. Okay. In that case, on the back side of the February action item list it says, Owen Hoffman should be invited to present his work on combined doses and risk at the next HHES meeting. I just wanted to find out where we are with that.

MS. CAMPBELL: Trisha, when we have a number of action items, we have trouble fitting them all on the next meeting. Sometimes they have to be spread through a couple of meetings. I have spoken with Owen about coming to the July meeting, and he has stated he would be available for that. Again, we just could not fit everything within this time.

MS. PRITIKIN: I just wanted an update as to where we were on it.

MS. CAMPBELL: Right. And that is stated, I believe, in the response letter from ATSDR. On the action list, I just wanted to mention a couple of things that you have in front of you. One is a revised Hanford Health Effects Subcommittee FAQ sheet. There was a request from the committee that ATSDR do revisions to the old FAQ sheet. We have done those revisions and it is available for you to look at. If you have any comments or questions, we can talk about it during a break or something, but I just wanted you to see that it is there now, and there may be discussion on it later.

The other was updating the operational guidelines. We have updated those to include the membership selection process, which was provided to the committee a couple of meetings ago. We incorporated committee requests into that process and finalized it, and that has now become part of your operational guidelines. In addition, in going through the document, we have made a few editorial changes -- well, they're a little more than editorial. They reflect basically the fact that we are now doing the administration of this committee without contractual support, which you have seen this year. I would like for everyone to review this. If you have any comments, please address them to me, so at the next meeting we can go ahead and finalize the document. But again, basically the only changes were to reflect that we are doing the administrative support through ATSDR and not through a contractual support system.

DR. VAN BUREN: Linda?

MS. KIER: My concern is partly related to Trisha's question. When we lost our quorum, we had a discussion about apparent conflicts of interest and the CDC, NCEH procedures for contractors, with regard to data-gathering at FACA sites, and even sites not in this country. And I'm wondering where on the agenda today we can touch on this matter, and if not extensively discuss today, then at what point we can find the time to put it on the July agenda, so that it doesn't slip as it did when we lost our quorum last meeting.

MS. CAMPBELL: I'm going to respond to that, because Mike Donnelly could not be in attendance today. As part of the packets you have, there is included a response letter from NCEH that includes information on the process used for solicitation and awards of grants and contracts. Now, Linda, the idea was that people had this in their premailing, and there could be some discussion today with Mike. Unfortunately, Mike is not here, so we would have to, you know, consider that

that should be something on another agenda. But there was a response from NCEH on that request.

MS. KIER: Thank you. And I am aware of that; I did read the RFP enclosure in our packet, and of course it raises many more questions. And I'm very, very concerned that we do allow time on the next agenda. And so I would like to know where on this agenda we can definitely get that placed on the next meeting's agenda, and whether or not Mike Donnelly or some other responsible person will, in fact, be here in July.

MS. CAMPBELL: I cannot respond to the latter part of your question. It is typical for this committee that we will discuss action items for future agendas at the end of the meeting, so I would say that's when we would talk about it.

MS. KIER: If we lose our quorum, will we be able to make a firm agenda place for that, if the group -- if the majority of the group is in favor of that?

MS. CAMPBELL: No. I'm sorry. I'm trying to give you the straight answer. We'll try to handle it while we have a quorum.

DR. VAN BUREN: Do we know how many individuals are not going to be able to stay until 4:00 on Friday? Okay. So we're down two people.

MS. CAMPBELL: So a show of hands, who's not going to be here until 4:00 on Friday? The liaisons don't count for the quorum. Okay.

DR. VAN BUREN: So I think we have our quorum.

MS. KIER: Thank you. Thank you for the quorum count, I appreciate that.

DR. VAN BUREN: Okay. I'm keeping the action list rolling, because I know Lynne does that, so she'll have this as an issue. Van?

MS. CHASE: Van Chase, CDC. I'm just going to advise Linda that I'll bring this to Mike's attention, and I'll be talking to him later today. So any concerns that any of you may have with regard to NCEH activities, let me know, and then I'll bring it to their attention. Thank you.

DR. VAN BUREN: Any other issues of concern with the action list or the a agency response? Marlene?

MS. NESARY: Yes. I'm Marlene Nesary. I'm wondering, if Mike Donnelly isn't here, is there a, quote, responsible person representing that agency here, for the agency updates? That's you? So when you give your agency update, if we have some questions, that would be the time to pass them along?

MS. CHASE: Yes.

MS. NESARY: Thank you.

MS. CHASE: I don't know how responsible I am, but I will be that person.

MS. NESARY: Thank you.

DR. VAN BUREN: Okay. I'd like to move on to the ICHHP update, except -- is Rachel providing the update? Okay. Then we'll have to wait for Rachel to return. Marlene, could we go ahead and move into the local media coverage of Hanford-related issues?

MS. NESARY: I guess we could, yeah. I'm going to lay out some of the clippings. I have a selection of newspaper clippings mostly, and also some downloads from a couple of e-mail newsletters that I subscribe to, that provide a kind of editorial overview of different stories in the Northwest and nationally, relating to Hanford issues. And they're pretty interesting, and you can get on those mailing lists pretty easily. The first article that I want to talk about, there was an interesting long article a week ago, written by a young woman who had been at Chernobyl, who had been a child at Chernobyl. And this got big, sort of front page coverage, and I thought that was neat. Her family is in the Tri-Cities now. But it was quite an impassioned article written by her, and it ends with something I want to read to you. Let's see. "Human and technological progress has a bigger impact on our lives than we think. We've been moving at an incredible speed. Our inventions make lives easier, but the further we go, the more complex it gets. It all comes down to a price.

Most commonly, it's human sacrifice, sacrifice of human emotion and life. And even though life goes on, casualties along the way do count." Just a little reminder that casualties along the way do count. Then she ends by asking us to look at the real picture of nuclear aftermath. There was another legal judgment against Fluor Northwest, ordering them to rehire pipe fitters who'd been fired evidently because of whistle-blowing activities. And so Fluor Northwest was ordered to pay back wages and damages, and the Government Accountability Project was the lead group in some of that work. And the article ends with a comment from Tom Carpenter, who is a lawyer with the Government Accountability Project. And he says, "At a minimum, DOE should discontinue its practice of reimbursing the contractor legal fees, which subsidizes illegal retaliation." We might consider that as a recommendation ourselves, I think. Another article in the Tri-City Herald talked about Abandoned Nasal Radium Treatment Debated. There was apparently, at some point, a period in time where it was thought that ear infections and other kinds of ear, nose and throat problems could be treated with little radium pellets.

Well, there are now some health consequences of folks who were part of that. And the last two paragraphs in this newspaper article are instructive, because it refers to two groups apparently at odds. The first one, it says, "Public health advocates say the government should warn former radium patients that they could be at risk." That's "public health activists." And then the next paragraph, laid out as if in contrast to public health activists, it talks about CDC. It says, "But the Centers for Disease Control and Prevention said diagnostic tests are unnecessary." So I thought that was an interesting treatment of who the players are in that discussion and where they sit. That was an Associated Press article that was printed in the Herald, not a local one. Continuing on, a sort of agency update, ATSDR got some press. And I've been interested in other studies that

ATSDR is doing around the country, and how long those take, what kinds of functions are being performed by ATSDR, just so I have a better understanding of how that -- the system works nationally, not just here.

There was a train spill in Alberton, Montana, three years ago when I was still living in Montana. It was very -- I was very aware of it. And now, three years later, here's a report from the Missoula Independent talking about that study and talking about ATSDR's work in it. So three years later a health assessment document has been prepared, and medical testing of victims is being put in place.

Now, what strikes me about that is that that's -- that's a three-year start-to-product time line. And certainly Hanford is a lot more complicated than a lot of other sites, but it's just interesting to compare how long things take, depending on who you're working with and what the situation is.

Finally, in a more general vein, we get regular updates in the Tri-City Herald about how important Hanford is to the economy. And the latest ones suggest that -- 16 what -- Hanford's economic effects accounted for 36 percent of the Mid-Columbia's jobs and 64 percent of the area's wages. So once again, you see that it's about a third of the workforce and two thirds of the wage pool. So the high-paid jobs in the Tri-Cities are allied with Hanford. That's still the case. It's been the case for 50 years, and it's still the case.

Now, on to two other more specific controversies that played out in the Tri-Cities. One of the most amusing and perhaps the saddest one had to do with Dave Barry, the syndicated humor columnist who wrote a column about Hanford and the radioactive ants. And this came out last month, just before Mother's Day -- yeah, last month, that is, not this month. And we were warned almost a week in advance by the editors of the Tri-City Herald that this Hanford-bashing humor columnist was going to be writing about radioactive ants and overexaggerating threats and so on, and we should be warned and plug our ears and our eyes, whatever we needed to do. So then we get the Dave Barry column itself which is, you know, it's a humor column -- and it works on exaggeration and so on. But it's also telling, in its way, you know. I'll read just a couple of things from it. "I start to worry when officials tell me not to worry. Officials at the nation's most contaminated nuclear site insist there is no danger of Hanford becoming the setting for a '90s version of Them, the 1954 movie starring James Arness and James Whitmore, in which huge, marauding ants are spawned by nuclear experiments in the desert." So Barry goes off on a riff about that and, you know, it's pretty funny.

Then we get a whole bunch of letters to the editor from local folks getting into the middle of this controversy over humor. And the one -- my personal favorite is titled, "Lighten Up." And it's from somebody in Richland, a worker, a Hanford worker who says, "The assertion that officials are about as trustworthy as the weather report is not new, particularly disturbing, or widely debated." And then he asks if we can only laugh -- if we can laugh at everyone but ourselves, is that what we're doing.

So anyway those -- that will be the -- I'll put those on the table so, if you want to follow this serious controversy over name-calling, we can do it. But I think that name-calling is really sort of where we are in a lot of ways still at Hanford, and within the local media. The editorials, for instance,

regarding the FFTF and Hanford bashers who don't want it started up, and the war that goes on between those two factions. It devolves to name-bashing all too easily.

And we saw that again when the HTDS study meetings were held in Spokane and Seattle, and in the local coverage of that on NPR and the radio. What came out in the newspaper and on NPR are pretty much emotionally loaded stuff. Trisha was quoted, and that -- the coverage struggles over and over again with how to put together personal testimony with technical data. And nobody seems to know how to do it, and so it devolves to that name-calling, bashing, mutual bashing thing.

And, you know, it's my hope that this body can address some means of putting those two kinds of knowledge together. How do you put together personal testimony and personal history with technical data, in a way that they -- that we can look at the combined effects of those? That seems to me to be a really intellectually juicy problem, and I hope we can dig into it. And that's all.

DR. VAN BUREN: Thank you, Marlene. I'd like to now move on to Rachel Moses's report of the ICHHP meeting of yesterday.

MS. MOSES: Thank you. Bill Burke -- in our agenda we always have time for an opening prayer, and I asked Bill Burke to do the opening prayer. And we had the opening prayer, and then we had Council business that we wanted to discuss, some housekeeping issues. And the Council decided that we probably should go into executive session so that we'd have a -- well, a freer time to talk among each other.

So we went into executive session. And some of the issues that we had to deal with were replacing the chairperson, the vice chairperson and the secretary. Our bylaws call for a two-year term on each of those positions. And I'd been the chairperson, preceding this role right now, for the last two years. We didn't really have a vice chairperson or a secretary for any number of reasons, but at any rate, yesterday we did select a -- I was reelected as the chairperson, Madeline Queahpama was selected as vice chairperson, and Jo Marie Tessman was selected as secretary.

And then we also have two tribal people sitting on the HHES. And Bill Burke and Wilber Slockish, I guess their terms were coming up, their two-year terms. And we recommended that those two people be continued on for additional two-year terms, if it was -- if it's possible to have two two-year -- consecutive two-year terms. After we did the housekeeping discussion, we went into the regular agenda. And Leslie Campbell discussed the Tribal Cooperative Agreements with the tribes. At this point there's nine tribes, and Leslie's had communications with eight of them. And some of the eight have gotten their applications in and are ready to begin their Tribal Cooperative Agreement activities on June the 1st. Others are still at the front door and hoping to get the paperwork in, so that Leslie can negotiate with the offices back east, to continue our cooperative agreement activities.

Beyond that discussion, we went into the discussion with Steve Ahrenholz of NIOSH. He gave us an update on their research activities. They have a lot of ongoing activities, and I believe what Steve was interested in doing was trying to see if the tribes had any ideas or ways that they could assist Steve at NIOSH with doing -- I think they were trying to do some -- they wanted to have

tribes involved in their worker studies, to see if there were any tribal members that still worked at any of these facilities, to be involved in some kind of worker study activities.

And then we heard from Greg Thomas of ATSDR's Seattle office on any updates that they had. And then we went into the CDC NCEH update from Van Chase. And again we heard from Steve Ahrenholz of NIOSH, and then we heard from Roger Briggs of DOE. We broke for lunch, and then -- well, actually we had -- we did this prior to lunch. But we had scheduled a tribal cultural sensitivity training session for yesterday evening and, due to a death in the area, it couldn't be held, and so that was canceled.

And beyond that, that kind of quickly summarizes what the tribes basically did yesterday. And I would like to invite other members of the Council to include anything I may have not included, or even to add something, if they so choose.

Well, I guess there's -- beyond that, I don't feel like there's a whole lot more I can add to what I've already basically said, except I personally am glad, too, to have a meeting here. And I know it's a little bit of a distance from the hotel to here, but it's really nice to come in.

And I spent part of my lunch hour yesterday walking in the gift shop, and I even bought the CD that was playing in the background music, because it was such a difference to come from a meeting room and then go into a gift shop where you have items made by tribal members that live here. Jo Marie Tessman has things hanging in that gift shop that she has made. She is an artist. And I think it's really unique that we have people that -- you know, the Indian tribes have been dealing with a lot of different issues throughout the past, you know, 2- or 300 years. And for us to come and be able to sit at this table, and turn around and go into the gift shop and see some artwork that is ongoing, it's remarkable. And I'm sure each of these Council people have a unique lifestyle, and that's what I appreciated more, I guess, coming here.

It's nice to go to the DoubleTree or Jantzen Beach or the Donatello Hotel in San Francisco or whatever.

But on the other hand, it's really nice to come to an area where you have -- at least I have some actual roots here. I have relatives here and then friends here, and I can't say that for other cities. And so I think just having a meeting in an area like this can give you a little bit of cultural sensitivity, although it's not exactly what was intended. It's enough of a difference, I think, for you to notice the difference. And beyond that I really can't think of anything more to add, except go to their casinos and play the slots.

DR. VAN BUREN: Okay. Are there any questions for the ICHHP Council? Herman.

MS. CAMPBELL: Herman, please use the mike.

DR. CEMBER: I think, if I recall, you asked, how do personal anecdotes get into the whole mix of public health controls, and you said that was a big problem. It does get into the mix because, in public health, when we look at the health of a community, every disease is present all the time. And you will always find any disease you're looking for in the community. The public health

question now arises, is there anything that's unique about that community that leads to that particular frequency of incidence or prevalence of that particular disease. And there are various ways of looking for it, and public health research is based on -- well, public health research is based on answering this particular question, and there are various different types of epidemiological studies.

That's the only way it can be answered, to relate the observed incidence to whether or not there's anything that's unique about that particular site. And as I say, I'm not going into lectures on epidemiology here, but that's the basis for public health research. So we do include all those things, all of those questions in the general mix, which leads to the initiation of the research projects.

When we do that, of course, if we find a statistical relationship, there also has to be some kind of a reasonable biological or biophysical relationship that might explain the statistical relationship. And I'll just cite one short example and then I'll give up the mike. Many years ago when I was at the University of Pittsburgh, Dr. Salk was -- this was before he developed the vaccine, while he was working on it -- he was using monkey kidneys to grow the virus. And the animal rights people used to protest this use of monkeys. And they handed out, I remember, leaflets showing -- well, first let me point out that the incidence of polio increases during the summertime.

And so they were handing out leaflets that the per capita consumption of Coca-Cola increases during the summertime, too. And the curve of the per capita increase in Coca-Cola was exactly parallel to the incidence increase rate for polio. And so they were saying, well, why doesn't he investigate Coca-Cola as a cause of polio, rather than killing off these poor monkeys. And there is clearly, I think, no relationship between Coca-Cola and -- no biochemical or biophysical relationship. So there was a case where statistics really didn't do us any good.

But basically what we do in public health research is statistically try to find whether there's anything unique about the particular community. And we do that in several ways epidemiologically. And one of them was in the report that we have that deals with a dose response relationship, and I think we'll discuss that later, but we do take that into account, into the mix.

DR. VAN BUREN: Glyn?

DR. CALDWELL: Well, I wasn't going to bring it up, but I think I will. If most of you remember -- I'm Glyn Caldwell. As most of you remember, there was a meeting here in September -- not here, but in Richland, in September of 1986. And after hearing from a lot of people, one of the consensus agreements was to do a thyroid disease study. And, in fact, it was the number of anecdotes and the number of personal stories that actually led to getting consensus on that. That was a very mixed group, and it was hard at times just to get them to agree whether the sun comes up in the east. The fact that we had six consensus agreements or consensus statements always seems to me to be a miracle.

DR. VAN BUREN: Okay. What I'd like to do now is move into the agency updates. We're getting ahead of schedule, which is fine, because we have a lot on our agenda. Marlene? I don't think debates are needed right now, but if you have a comment, then --

MS. NESARY: It's just a quick one. It sounds like, according to what Herman and Glyn were saying, that there kind of is no problem, in terms of integrating personal experience and history and epidemiological work, and I just beg to differ. I think that's exactly a good example of how the problem works.

DR. VAN BUREN: At the ICHHP meeting there was a letter that was presented that we'd like everyone to know about, and perhaps Dr. Simon could tell us a little more about this. This is about the June 19th meeting that will be held in Spokane, Washington, as a public workshop to discuss the HTDS study. And some of the members of the committee did receive the letter because of other associations with the study; however, this has not been made known to this group. So we'd like to get this out and let everybody know about it, and perhaps have a little bit of discussion about participation from the HHES at this. Dr. Simon, would you like to take the mike? Do you have anything to add to that, please?

DR. SIMON: Sure. Thank you very much for the opportunity. Is this on? Thank you. I'd actually hoped to make an announcement during the public comment period, but this is fine. One reason I'm -- the primary reason I'm here today is to make an announcement, and to try and enlist your help to make sure that other people hear about this, as well. And that announcement is of a public meeting that the National Research Council is going to hold. Let me first back up and just give you some information, that the National Research Council was contracted by the Centers for Disease Control to conduct a peer review of the HTDS. And this is part of a long, ongoing process of review that the National Research Council has been doing on other radiation studies conducted by the CDC.

This review uses a committee consensus kind of a format where there is a committee that's been appointed by the National Research Council through the Board on Radiation Effects Research. The Board on Radiation Effects Research is just one office of the National Academy that specializes in health effects of radiation. For example, that board administers the American side of the Radiation Effects Research Foundation in Japan, which is the longest ongoing radioepidemiological study in the world, fifty years of atomic bomb survivors. So this board has a lot of experience in this business.

Their charge, in this particular context, is to review the entire HTDS, basically for technical merit. Now, in the past few weeks that charge to the committee has been expanded to some degree, and this is on our Web site. And I've also enumerated some of the points on an announcement letter, which some of you have seen, and I also have copies to hand out to other people. And that charge is to look at the entire range of issues that both the scientists and the public are interested in evaluating, with respect to the HTDS. And that includes, for example, statistical power of the study, dosimetry and uncertainty, and how the study was executed. Those are some of the main technical points.

To give a broader context for review, the committee is also interested in other kinds of evidence that shed light on the possible health effects from the Hanford experience. And finally, issues related to how the report was communicated to the public, and how it was represented, both in verbal form and in written form. So these are the main areas that the committee will be looking at,

and these are also the areas that we hope to hear public comment on at the meeting that we're going to hold. So let me get right to the point and give you an announcement of the meeting.

The meeting will be held on June 19th -- that's a Saturday -- in Spokane at the Ridpath Hotel. This meeting is open to the public. In fact, it's a meeting to engage the public. The National Research Council committee will be there, and we're inviting all members of the public, as well as various scientists and experts who have been suggested to the committee to attend the meeting, and to either present oral comments or in writing, if you'd prefer. So if you'd like to speak at the meeting on any one of the questions that I've mentioned, we'd be happy for you to do so. I'd really like you to notify me in advance, if you could, and that way I could guarantee a time for you to speak, but it's not necessary. Anyone is welcome to attend the meeting at the last moment and make a statement. So is there other information I could provide to you about this?

DR. VAN BUREN: Could you provide us your phone number, or how you want us to contact you?

DR. SIMON: Sure. My contact numbers are on this. I'm going to leave a whole pile of these announcement sheets on the table outside. Back there? Okay, I'll put them up there. Any other questions for me?

MS. PRITIKIN: How will you be facilitating the -- I mean, if a person wants to come in and make a comment or something, will you have a list so a person knows how far down --

DR. SIMON: It's a good question. Part of the reason I'm here today is to talk to individuals, including any of you. Please come around and talk to me during a break, if you have ideas about how an effective format for this meeting might be constructed. Let me at least tell you this much. The committee is not there to offer any real comment, because the way the National Academy of Sciences does its work is that it accumulates -- it gathers information, the committee goes into sessions and tries to sift through that information to come up with its opinions, and then they write a formal report. That report goes to external peer review, outside of the academy, to a number of chosen experts -- which they have to answer to -- and then that report is finally released. So what I'm saying is that the committee will make its statement eventually through that peer review report, but at the meeting itself, they won't really be offering an opinion. It's really going to be a meeting to hear from persons like yourself. So we will have sign-up lists, we will be trying to address four major topic areas over the course of a day. And we hope that people will be able to speak on those focused areas.

MS. PRITIKIN: And what were the hours again?

DR. SIMON: Sorry, I may not even have mentioned it. It's going to be 8:30 to 5:30 p.m. on the 19th of June.

MS. JURJI: Steve, I was wondering, I realize that I've never had a chance to ask you whether this expanded mission on the part of NAS, did that come from the committee itself, or was it CDC that pretty much directed it, or who do you credit for this?

DR. SIMON: That expanded mission was really in response to a lot of public input, that there were issues that were not generally on the committee's plate. People like yourself, like Trisha Pritikin, like others, wrote to the academy and -- or actually wrote to CDC, I guess I could say more accurately, and that fed back to us in an expanded charge. So there's a real good example of how you can influence the process. And the committee is really eager to look at this whole range of questions.

MS. JURJI: Just one last comment: I have to say, I hope as many people as possible can attend that June 19 meeting. This is a rare, rare opportunity.

DR. SIMON: I appreciate that endorsement.

DR. VAN BUREN: Marlene?

MS. NESARY: Yes. Hi, I'm Marlene Nesary. I was just looking at the paragraph where you're laying out the four kinds of info you're looking for. And in number three you say, other kinds of evidence that shed light on possible health effects. Could you give me a range of what you think other kinds of evidence might be, give me examples?

DR. SIMON: Well, I've heard this morning already talk about other kinds of evidence. Basically, other kinds of evidence would -- if it was a published study, we would already know about it. So other kinds of evidence, I guess, would be personal experience and anecdotal evidence. I can't tell you how that might weigh in, but the committee is just trying to keep an open mind to kinds of information that they would not normally have at their disposal. That's really the purpose of this meeting.

In other words, if it's a published paper or a technical report of any kind, they would most likely have access to that already. So hearing from individuals in person will be a way to accumulate other kinds of information. So I can't give you any bounds on that, but the real focus is the HTDS. But there may be issues of other kinds, may be other health issues that are related in some way.

MS. NESARY: Thank you.

DR. VAN BUREN: The letter we just got only has the front page, the back page is missing. So if we could get copies made for the back table --

MS. PALMER: I think what Steve's providing on the back table will be complete.

DR. VAN BUREN: Okay. Louise, please.

DR. KAPLAN: I'm wondering if you could possibly explain the format of this meeting to the group. And I really think it's important that there be an understanding of who you will be inviting, or who -- how you anticipate inviting people, and what percentage of time is really there for the public, versus there for people who you will be inviting. Because I think the characterization of the meeting needs to be really clear, because otherwise it becomes -- I'm concerned that people

are hearing that this is a public meeting, and that they're going to get there and find out that there's only a certain amount of time for the public.

And I want to make sure that, if there's a lot of public that want an opportunity, that there is time for that. And you might want some feedback from people as to how many people perhaps expect to attend, expect to want to give some comment, and how much of the meeting do they think would be reasonable to allot for that.

DR. SIMON: Okay. Thank you for the question, Louise. As you know, I've been in contact with you and with some others, and I don't have a complete format or agenda laid out yet. In fact, I'm here over the next few days to try and set that up and finalize it. But our concept basically was to address the questions that have been identified to us as seeming to be most important to the scientists and to the public. And so that's how the questions -- or at least the focus areas came about. The meeting itself will not be a debate. The academy really has no business in sponsoring that kind of event. We really are trying to gather information that might not otherwise be available.

To do that, we hope to do two things. We hope to hear from people that will just decide to come at the last minute, or that may not even be an acknowledged expert, but that have some kind of experience to tell us. At the same time, there may be scientists that work in very different settings in Washington, D.C. and in the circles that the academy normally deals in, and so we want to hear from those scientists, as well. Now, some of those, as you know, have been recommended to us, the particular people that have worked in areas of statistical power or dosimetry or uncertainty.

So we're anticipating inviting, let's say, four to six people that would be recommended as experts in an area, that might not otherwise be able to come to Washington. Now, the rest of the time, which I would say would be at least half of the time, would be available for what you might call true public comment.

Now, those time apportionments, I'm completely open to revising them, and I'm here actually today to talk to you and to others. So if anyone has a suggestion to me about how to have a meeting that would actually be responsive to your needs, would you come around and see me today?

DR. VAN BUREN: Trisha?

MS. PRITIKIN: Thanks, Steve. I just wanted to point out to people how unusual this meeting is that's going to happen, and how unusual this extended review by NAS actually is. And I want to give a lot of credit to Tim Connor and to the members of this NAS committee. They've been very responsive. We've been in real consistent communication with them ever since January 28th, practically. And a letter signed by 22 citizens and organizations was taken to Dr. Dick Jackson at NCEH because of the outrage by citizens at the way we were shut out of this process, on knowing what the study was going to say and how the results were going to be portrayed in the media.

And so I want people to understand that this is very unusual, and it's the result of public input and outcry about the way the public received this information from the study. And I want to thank Steve Simon today, and the members of the NAS committee, for what they're trying to do here. And I just -- Tim Connor's worked real hard on this behind the scenes, too, and I just wanted to

make sure that people knew how hard he had worked on this. So I hope people will come and give input to this committee.

DR. SIMON: Let me make just one last follow-up comment. This meeting will not be the only public input to this review process. So if, for any reason, there is an overwhelming kind of opinion provided to this committee from a particular sector, it's just part of the input. There are other committee meetings, the committee members have access to the total range of literature on thyroid cancer and exposure to radioiodine. They have access to the investigators themselves, and they've had briefings by CDC and the agencies, and so this is just one part of the public input. And I guess I want to hear whatever the people in this locality or in this region have to say.

DR. VAN BUREN: I had a question that was asked of me, to bring to this meeting, regarding kind of the overall review process for HTDS. If a person writes comments before, is it still a July 1 deadline for comments on the HTDS study, or has that been expanded?

DR. SIMON: To NAS or to --

DR. VAN BUREN: Well, that's what my question is. If we have comments, do you send them to CDC, or do you send them to NAS, or are they shared between both?

DR. SIMON: Well, I think there may be different review processes going on, and I'm only knowledgeable about one, and that's the NAS. I know that there was a review, for example, of HTDS before the academy ever got started. And we're not part of that process, and we haven't had access -- well, I guess we do have the written comments, but we weren't really part of it. If you would like to comment to the academy on their review process you can send that directly to me, and my contact numbers are on here. I think if it goes to CDC it might filter its way to me, but I don't know how secure that path is.

MS. KIER: Deadline? Was there a deadline on that, or how does that work?

DR. SIMON: We have about six months to conduct this review, and we began in early February. So I would suggest, if you have comments, that either before the June 19 meeting or a few weeks after that, up until mid July, that that would give us enough time probably to digest them, but after that it is getting pretty late.

DR. VAN BUREN: Trisha?

MS. PRITIKIN: I forgot to ask one part of the question on the other kinds of evidence on thyroid health outcomes. Would that include a presentation of information on the Utah cohort, the Marshall Islands work, or some of the Chernobyl studies?

DR. SIMON: I've had this question, Trisha. It has a bearing. As I said, if it's published information, then we would have access to it already, because we do extensive literature searches. And also, all the committee members, just by working in the field, are familiar with all of that. So our goal is really not to provide all the evidence at the meeting, but it's to provide additional input that the committee doesn't already have. However, the committee has extended an invitation to

Lynn ^ Lyon, for example, to talk about the Utah -- exposure of Utah residents and how that might be as a comparison. What were the other groups that you mentioned?

MS. PRITIKIN: I brought up Chernobyl and the Marshall Islands work.

DR. SIMON: There will be several committee members that might be familiar with the Chernobyl studies. I don't know whether I've yet invited anyone specifically on that. Marshall Islands, I'm probably the person, so we'll see how that might figure in, in terms of time, but we really want to stay focused on the HTDS.

MS. PRITIKIN: Are we on the tape? I can't hear the mikes working right now.

MS. CAMPBELL: You need to remember to define who you are, because the reporter is not going to be able to pick up your name tag from where she's sitting.

MS. PRITIKIN: Right.

DR. VAN BUREN: I wonder if we could just get a show of hands of people who think they might be able to attend on June 19th in Spokane. So we have -- the states are being represented. Maybe one of the tribal folks and perhaps one or two of the individuals that sit on the subcommittee.

MS. NESARY: Can I ask one quick question?

DR. VAN BUREN: Go ahead.

MS. NESARY: Marlene Nesary here. Do we know -- I don't know who's on this NAS committee, and I don't know who the people are that you're inviting to speak about Chernobyl or the Nevada Test Site. Could we get a quick bio list of the known members?

DR. SIMON: Sure. Sure. I'm sorry I'm not providing a more formal presentation, because I didn't realize anyone really would have that degree of interest. First let me say that the committee, their charge, the roster of the committee and their bios are all posted on the National Academy of Sciences Web page. So that's one way, although it's a bit hard to navigate. If you'll just go into the projects that are ongoing, and there's probably at least a thousand projects at the Academy, but you can search by the keywords and try Hanford, and you'll get pretty close to it by then.

MS. NESARY: Thank you.

DR. SIMON: I can give you further information now if you think it's worth your time.

MS. NESARY: Will the invited speakers be posted, or will we know that, too? I mean, following up kind of on Louise's question about what kind of proportion we're going to --

DR. SIMON: I don't know if I'll post that amount of detail, but possibly I can. But before the day is over, before the next two days are over, all that could be decided. So I encourage you again to come around and talk to me, and then I'll get a better sense of how to apportion the time.

MS. NESARY: Okay. Thanks.

DR. VAN BUREN: Linda?

MS. KIER: Mr. Simon, there was a question raised, I believe both in a letter and at the last meeting, about our delegates to NAS -- by our delegates to NAS, who -- there was a question about the thyroid expert, Mr. Schneider, and that he had also been directly involved with the HTDS study. And although I'm not totally cognizant of the difference between what you folks do and a peer review of a study, I guess to the public -- to the ordinary public, that does have the appearance of a potential conflict of interest.

DR. SIMON: Yes, yes. Dr. Schneider is not a member of the committee. He's been a consultant of the committee, just to bring in -- just to attend and provide information. He's not a voting member of the committee.

MS. KIER: Okay. So you do have somebody who is a thyroid expert, that was not he, that -- since this is a thyroid study?

DR. SIMON: Yes. Yes.

MS. KIER: So there was someone else there who --

DR. SIMON: Dr. Bertrand Brill is --

DR. VAN BUREN: I think this is really a debate that needs to be happening after, as you've suggested. So unless we're going to bring this as a formal issue for this group -- which we might want to do -- I think we should just take these as individual questions. Okay? Thank you. We just don't have time. This group may want to bring this up later on as an issue, in terms of are we going to send a representative, is there an opportunity to participate as individuals or as group representation.

MS. CAMPBELL: We are having a problem with the microphone system right now, it is not functioning. So it's almost time for a break anyway. Why don't we take an early break and they can try to fix this? Okay.

DR. VAN BUREN: We're going to take a break until ten after 10:00.

(Break.)

MS. STEMBRIDGE: My apologies for driving down this morning, but I had finals last night. I understand that we're right on time, so we will -- Leslie has an announcement to make, a couple of announcements. I want to remind everyone to please speak directly into the microphones and state your name. Nancy Schwartz, who is our usual court reporter for our meeting, is ill and was unable to attend. Judy Hunter is here filling in for Nancy, and she doesn't know any of us, so we need to

be sure and speak clearly and identify ourselves as we go to speak. Leslie has a couple of announcements and then we'll get to the agency update.

MS. CAMPBELL: Hello, I'm Leslie Campbell. I just wanted to remind everybody that, for those who are on the schedule for retirement 12/31/99 -- and it's listed on the roster, so you should know who you are -- that if you wish to reapply and continue to serve on this subcommittee, those applications are needed by the end of this week, May 15th. We do have scheduled a membership selection panel for June 3rd, so we are doing it at that time in order to make sure that we can have people ready and seated at the replacement time, and so that this does not get into a long problem like it has in the past, with people not knowing when their term's going to end or what's going to happen next. So please know that you've been reminded of this already. We do have several applications that we have received from members, current members, and also from others that are interested in the committee. And again, June 3rd is when we're making these selections. Before that, we need to have those applications in this week, so that we can get them processed and ready for the panel selection.

On another note, some of us were talking about going out to dinner tonight. We've identified a restaurant that's come highly recommended, called Rafael's. I have some of their menus here. What we are proposing, for those who are interested, is to have the shuttle pick us up after the museum tour at 6:30 and take us downtown to Rafael's. In order to do that, think about it the next little while, come back from lunch, and see Marilyn if you are interested. Marilyn's at the back, and everybody knows her, so that she can make the reservations at the restaurant. And again, I have these menus available so you can take a look at them and determine if you want to go along as a group outing to Rafael's for dinner tonight. Just another reminder, and then I'd like to go on with the agency updates. Please do plan to stay around for the museum tour today. It's a fantastic museum and, since we did miss our cultural awareness training, you're going to get an awful lot, I think, as individuals, as we go through this museum tour a little later; correct, Jo Marie? And at this point I will just turn it over to the chair.

MS. STEMBRIDGE: Okay. Can you hear me? We'll move on to the agency updates. Let's start with ATSDR, since you are the acronym listed first on the agenda.

MR. THOMAS: Good morning, I'm Greg Thomas. The ATSDR update is fairly brief this time around. Since our last meeting, there really hasn't been much of a change in the funding situation for medical monitoring and the iodine-131 subregistry. While we've received, I think, the majority of our funding from the Department of Energy for the year for most of our program activities, there are -- those are the two notable exceptions.

The medical monitoring and the subregistry continue to be unfunded at this point. The discussions with the Department of Energy and with the congressional staffers are at a very high level and they're ongoing. We're hopeful to get a decision, a final decision by the end of June on those two programs and the status of that remaining funding, whether it will be released to us or not. I would say, though, that our FY 2000 budget has gone forward to the Department of Energy. It includes full funding for all of our Hanford-related activities and all of the activities across the DOE sites across the country, including medical monitoring and the subregistry. They're included in the 2000

budget, and those numbers have gone forward and DOE has them and is in the process of reviewing them and including them in their budget request.

The only other thing that I would mention in the way of an update is simply -- I think we mentioned it at the last meeting -- that funding for the Hanford Health Information Network is coming through ATSDR now, and that the network is working to put together a cooperative agreement application so that we can give them roughly \$600,000 in continuation funding for this fiscal year, that we have received from the Department of Energy. So that money will be going to them, and then funding for FY 2000 will also come through ATSDR, in the way of a cooperative agreement. Are there any questions?

MS. STEMBRIDGE: Linda?

MS. KIER: I'm not quite clear on how this all relates to IDA, and I didn't see a place for an IDA update on the agenda. Did I miss that?

MS. STEMBRIDGE: I'm hoping that maybe Van can incorporate a bit of that into the CDC update.

MS. KIER: So that's coming? Okay.

MS. STEMBRIDGE: Jude?

DR. VAN BUREN: I just wanted to know, is there anyone from Bob Spengler's office? Or Greg, will you be representing that office for the Public Health Assessment Working Group, PHAWG I? You will be?

MR. THOMAS: Yes. Bob sends his regards, he could not be here. I will try to cover that, also.

MS. STEMBRIDGE: Anything else before we move on? All right, on to CDC.

MS. CHASE: Good morning again, I'm Van Chase of CDC-Seattle. Mike Donnelly was not able to attend. He had a family emergency, so he sends his regards, and I am the short version today. Couple things only: the CIDER corrections have been made for the CIDER model. And in that regard, all of the tribal reports, summary reports, have been recalculated. So far we have four that are completed, that are in the final stages of final reports being drafted and put together, and they will be shared shortly with the tribes. And we're getting a graduate student in to help Liz Donnelly, who is our main person doing all of the HEDR calculations, who will be helping her. And hopefully by September we'll have all of the tribal reports completed.

You've heard the announcement regarding the HTDS review to be held in Spokane. This is one of the review processes that NCEH has encouraged and we'll also be there to participate. If any of you have any further questions of the Radiation Studies Branch people, I believe Charlie Miller will be there, as well as Mike Donnelly, possibly Mike Sage, and I know that Dr. Smith will be in attendance. So if you have any really precise questions to ask of them, they will be at the June 19th meeting. The NCEH has been undergoing a reorganization, and we have a new division within our

center which deals with birth defects and genetic and health effects. And one of the first areas that they're going to be -- well, they are already looking into, but will be focusing on -- are the health effects of alcohol and Fetal Alcohol Syndrome. So this is a whole new area that the National Center will be looking into.

The branch that we refer to as the Environmental Hazards and Health Effects Division is now called the Environmental Health -- Environmental Hazards and Emergency Services. And we're also adding on the epidemiology of disasters like hurricanes and tornadoes, earthquakes, things like that. They've been doing this type of stuff for a long while, but have now created a focus in that field. The former director of the Environmental Hazards and Health Effects, Henry Falk, is now -- has been transferred over to ATSDR and is the Acting Deputy Administrator in that area. So we're hoping that we'll continue good relations with that area.

One final note, the NCEH has continued funding for one more year the IDA, and Ellen Haars will speak to that in a while. One final thing, the Columbia River study is -- will be beginning shortly, and Elke Shaw-Tulloch has been in communication with the consultant, and will also give you a little bit more detail on that, which I'm not well acquainted with. I can attend whichever session of the working group you would want me to this afternoon. I primarily will listen and take any questions or concerns back to our Radiation Studies Branch.

MS. STEMBRIDGE: Ellen, do you want to give your brief update on IDA, and then Rachel and Trisha have their cards up, and I see Marlene.

MS. HAARS: Yes, no problem. The committee, last time we met, recommended that we, because of the tremendous number of responses -- and it's roughly about 10,000 now, it's a moving target every day -- of individuals that have submitted their residence history. If you remember, the IDA project is three steps. The first step is to submit your residence history; and then, based on that, then we mail to them the diet history, and they fill that out; and then the dose estimate. Because of the large number of the response, we will not be able to get to everyone as quickly as we wanted to. And this group recommended that we send out a flyer, and we have sent out a flyer. And there was a copy of it in the back -- I don't know if everyone got one or not -- of the flyer that went out. And it, in essence, gave them an update, said some people are no longer interested, and so they've simply added it in and said, take me off the list, and we'll do that.

We have had requests for roughly 12,000 more residence histories. I don't know what that means. I don't know if 12,000 more people are going to submit their document or not, but there has been a tremendous response on that, also. We have just completed staffing, so that we are now up to full staff and hope to be moving quicker than we have been previously. The funding was 953,000 in round numbers, and it goes until March 29th of the year 2000. We are hopeful that we can get all the work done that needs to be done. If there are any questions, I'd be happy to respond.

MS. STEMBRIDGE: I think I've got a list of folks who have their cards up, so I think we'll just go around and take all those questions. Rachel?

MS. MOSES: This question is for Van, I forgot to ask you yesterday. You mentioned some of the tribes have to have their doses recalculated. Do you know when those tribes will be revisited by CDC to do a briefing of the new calculations?

MS. CHASE: I don't know the exact date for the visits. Some tribes have asked for a person from Radiation Studies Branch to come and give a report on the final calculations. And, as I understand now, Liz Donnelly has the first four, the actual calculations were done and then they've been recalculated. And I will try to get to her shortly and see what kind of a visit schedule they're proposing. And any tribe -- well, among the four that are finished are Colville, Kalispel, Coeur d'Alene, and Nez Perce are the four that -- or, I'm sorry, Spokane; not Nez Perce, but Spokane. And so we can -- I'll be in touch with the people, representatives from each of those tribes, and seeing what their wishes are, whether they want just a final report to be mailed with an explanation, or if they would like to have somebody from the branch come out and make a presentation to the Council. So I'll be in touch with you.

MS. STEMBRIDGE: Trisha?

MS. PRITIKIN: Van, I have three requests I'd like you to please take back to Mike Donnelly, et al., if you would. And I was told this is the proper time to raise that. One is that we'd like some information on task orders, as opposed to the RFP process which we got on competitive bidding. And I'd like to understand better how task orders take contractors out of the competitive bidding process. So that's the first question.

The second is I'd like to understand more of the composition on the NCRP's subcommittee on dose reconstruction, who's on that committee, who the head of that committee is, and who that committee oversees. Thirdly, I'd like to follow up on a request I've made almost every meeting, which is for added doses and risks to be provided to the public from Nevada Test Site, plus Hanford exposures. And this request was backed up by the three representatives of the three state health departments, and we're waiting for a response from NCEH on that.

So the first two of those, the task orders request and the information on the NCRP's committee on dose restriction, I'd like to request that that be put on the next meeting's agenda officially. But I don't know when to ask for that, so I'll just put that on the record now. And for the record, my name's Trisha Pritikin for the reporter. Thanks.

MS. CHASE: I'd appreciate, any of you who have questions, if you could write them out for me, and I will make sure that Mike Donnelly gets them. I will be talking to him a little later, probably at the lunch break, and if you have any concerns, I'll carry them to him. But I would appreciate, any lengthy questions that you may have, if you could write them out and give them to me.

MS. STEMBRIDGE: Just for folks' information, we have as a group requested that Owen Hoffman come and speak to us. And he had a schedule conflict, and he's not at this meeting. He is scheduled to be on the agenda in July, so that particular topic will be before us in July. And I want to, just for everyone's benefit, refresh our memories about how agenda items and requests of the agencies generally are worked through this committee. And it's that they come through a work group, and have

discussion and agreement -- have sponsorship, if you will, from a particular work group. And as we have four, generally speaking, pretty much anything that would likely come before us as an entire group would fit into one of those four categories. And so, for instance, the two -- Trisha's first two requests, it would seem to me, would be likely to come from the Studies Work Group and have their first discussion there.

So the process is that we do not simply raise our hands in plenary session and, by benefit of speaking out, gain a place on the full plenary agenda without some process of discussion. Now, I recognize that there are occasionally topics that don't exactly fit in one of those four slots, and we'll just have to take those up as they come along. Marlene's next, and I have you on my list.

MS. NESARY: Yeah, I have two quick questions. This is Marlene Nesary. One is for Ellen. I remember looking at the residence and history documents, but I don't remember whether or not there was a line for pica behavior, children who eat dirt, ashes and so on. Is that -- is there a place where that kind of data is gathered?

MS. HAARS: No. We will probably not be gathering that information.

MS. NESARY: I was struck by, in the Public Health Assessment documents, the difference between estimated dose for children who do that and children who do not.

MS. HAARS: No.

MS. NESARY: Okay. That answers that question. The second question has to do, again, with the RFPs and task order things, which I understood were brought up at the last -- you know, I was sitting at the meeting, at the end of the last meeting, when we decided that that should be on the agenda, although I understand that there wasn't a quorum. But following up with that, what I'd like to understand, in terms of CDC's contract awards, what percentage of DOE's site studies on dose reconstruction are handled through an RFP and what percentage are handled through task order, with dollar amounts attached to each, for the next meeting when Mike Donnelly, or whoever does report more thoroughly on that process. I do appreciate being sent the solicitation and award handbook or rule book, or whatever it was, but I understand that that doesn't cover all of the processes by which contracts are awarded. So --

MS. STEMBRIDGE: And it's unfortunate that Mike isn't here, because he is the person who could respond to some of these questions, and we'll just have to allow some extra time during the agency portion of our next meeting, so we'll have time for these questions and answers. And Louise, and then Linda.

DR. KAPLAN: I'm wondering if Van could possibly give us a report on the CDC meetings that were held in Spokane and Seattle. And I'd also like to know how those meetings were publicized to the public, since I never received notification, other than through an e-mail from Leslie.

MS. CHASE: The two meetings that NCEH had were last Wednesday, a week ago in Spokane, and then Thursday night in Seattle. I attended the Seattle meeting, and I don't know if anyone here attended the Spokane meeting. Maybe Greg might be able to answer particular situations from

Spokane. But I do know that we had a fairly good turnout in the Seattle meeting, probably about 20, 25 people were in attendance. We had a good turnout certainly from the Fred Hutchinson staff, and we had several people from the radiation branch from Atlanta who were there.

There were several main questions that were asked. Jim Thomas asked several questions regarding some of the methodology. And I won't go into that, but he questioned some methodology of the HTDS. And in addition, there were comments from the community, in terms of other types of health effects, the immune system being one, and why wasn't that covered. Let's see, I'm trying to think of what some of the other questions were. Probably it was more technical than anecdotal. For instance, why was not a control group included in the packet that was distributed at the meeting. And I'm sure, if any of you would like this information, I could get a packet for you. Let me know.

But in there was a question-and-answer paper several pages long, and it addressed some of the questions from the Spokane meeting that had been held the day before, and it brought up some other questions at the Seattle meeting. So there there was a fairly good question-and-answer response that was in the packet for everybody. And I'm sorry I didn't bring that with me, but maybe Greg could address anything that may have happened at the Spokane meeting.

DR. KAPLAN: Van, could you answer my second question, which was how was the public notified of this meeting?

MS. CHASE: In Seattle there was an announcement in the Seattle Times, a small little announcement that this meeting was going to be held at the DoubleTree, and Mike Donnelly was the contact person. I don't know what -- where else it was advertised. I'm not sure, in the Spokane area, how it was advertised.

DR. KAPLAN: Well, I just want to raise a concern about that, because the message that I got was that the meeting was from 1:00 to 5:00 in the afternoon. And because of commitments, I was unable to go to that. And it was only that day that I heard on the radio that the meeting was actually at night. And so I felt very misinformed, and I have some grave concerns about that type of public notification for a public meeting.

MS. CHASE: I'll carry that concern back.

MS. STEMBRIDGE: Greg, do you have something to add?

MR. THOMAS: Greg Thomas. Louise, the meeting, as Van said, was advertised in the papers, both in Seattle and Spokane. I think Mike said they ran the ad for three days the week prior to the meeting. And I didn't see it in the Seattle paper, but that's, I think, the only official notice of the meeting that happened. What happened, though, I think that you're referring to, is that there was a scheduled meeting of the HTDS Advisory Board from 1:00 to 5:00 in Seattle, prior to the Seattle public meeting that afternoon, and that was canceled. That was my understanding, is that that meeting was from 1:00 to 5:00 in the afternoon, of the advisory board, with the public meeting from 7:00 to 9:00 at night. And so the advisory board meeting was canceled, but the public meeting, that was the scheduled time for it. So –

MS. STEMBRIDGE: Linda?

MS. KIER: I share Louise's concern over that. It seems like, particularly in some sense HHES members are members of the public, but in another sense it seems like there should be some kind of agency notification or subcommittee notification. I'm not sure if this would be the province of our outreach group or what. But somehow the communication on issues like that, although I'm very grateful -- and I'm sure Louise is -- for e-mail from our DFO, somehow it seems like there ought to be more coordination on that score. I had some questions that were for NCEH, and a couple specific to IDA, but I guess I need to get some guidance on issues like this, where either they -- the issues don't fit into one work group category or, in the case of particularly the remarks that Trisha made, it's hard when she is to be chairing, say, the PHA -- the Public Health Assessment Work Group, and the issues might be more closely related to the Studies Work Group.

And so it seems it's very unwieldy and difficult to work through a consensus out of two work groups or from the chair of one work group to another. You see the difficulty in bringing these things in a harmonious fashion and in an efficient fashion? I don't think anybody's trying to make things more difficult for our chair and our DFO, but somehow it seems like issues that are of grave concern -- when it relates to funding delays, or potential conflicts of interest, or a lack of competition over RFPs and task orders or the awarding of contracts, or 90 percent of certain contracts for data-gathering awarded to one single outfit -- it's very difficult to understand how properly to bring issues like that to the group, because they're very important and I think important to the whole group. So perhaps some guidance? I'll stop there. I do have a question for Ellen on IDA, and we've gone back and forth between agencies here, so --

MS. STEMBRIDGE: You know, it is a struggle. And I think that there are a majority of folks on this subcommittee who would actually be interested in sitting in three or four of our work group meetings. And unfortunately, I think we're just going to have to do the best we can. And if you're at another work group or you're chairing that, and you're scheduled right head on with an issue that you want to discuss in another work group, I think you're just going to have to work it out, and have someone from work group A take over while you go to work group B, or talk to the chairperson there and designate some other way to route the information.

You know, the only alternative is to have everyone sit through every work group. And unfortunately, that means that we would be somewhere for three or four days, rather than two, and I think our efficiency would drop dramatically. It's difficult, and I acknowledge that, but I think we're just going to have to do the best we can. Do you want to ask your IDA question real quick? And then we need to move on.

MS. KIER: So you will guide our membership, our members gently -- specifically me -- if we inappropriately raise an issue that maybe should have been raised in a work group, but it's difficult to see how exactly to do it because it covers broad issues?

MS. STEMBRIDGE: I do that, as part of the job of the chairperson is sort of traffic cop issues, gently, but traffic cop nevertheless.

MS. KIER: Sort of prevent us from running with scissors?

MS. STEMBRIDGE: Yes.

MS. KIER: I wanted to ask Ellen, I read in our -- when I read our minutes from last meeting, I'm not sure if it was Ellen who said this, but someone had mentioned there had been delays in the dose estimates, not only because of the overwhelming response and some funding delays or lack of full staffing, but --

MS. HAARS: Well -- excuse me. Go ahead.

MS. KIER: -- but also that there had been some HEDR revisions to the dosimetry. And of course I'm very, very concerned with the data-gathering, not only for our Hanford site through HEDR and TSP, but through the contracts and task orders that have been let throughout our country for work sites, and even overseas. So I'm concerned about these delays. Could you tell us how -- was it five changes that had to be --

MS. HAARS: Well, the CIDER code was -- this is Ellen Haars.

MS. KIER: Could you briefly explain the CIDER, just reiterate what it is?

MS. HAARS: The CIDER code is the code that generates the --

MS. STEMBRIDGE: I'd like to have a traffic cop moment, if I could, please. I know that IDA has in the past gone to, I believe it was the Public Health Activities Group, and discussed IDA and HEDR at some length. And so I'm just checking to see, with our three state liaisons, if all of you or some of you are going to be at the Public -- at the PHAWG. I know that Jude said there's still no money. You know, we're going to -- we have time to discuss something other than medical monitoring. So I'm just wondering if we can funnel the IDA discussion there.

MS. KIER: Just the brief changes, the five changes, what those changes were.

MS. HAARS: I'm not aware of any five changes.

MS. KIER: There were changes from --

MS. HAARS: Do you want me to go ahead and explain this, Lynne, or how do you want me to proceed?

MS. STEMBRIDGE: I'll tell you my concern. We have two more agencies to go and ten minutes left before the agenda item about the thyroid disease study. Now, it's not exactly clear what the logistics of that are going to be, whether Scott Davis is here or going to be here, or he is just going to be -- he is here? All right. So --

MS. KIER: So in the interests of agenda, then, I will withdraw the question for now.

MS. STEMBRIDGE: Okay.

MS. HAARS: Lynne, could I just give an update on where we're getting responses from? This will take two seconds. Fifty-five percent of the inquiries or requests are coming from the state of Washington, 15.7 percent are from Oregon, 13.7 percent are Idaho, and 15.5 percent are other areas. We've received requests from all states except three, and it's -- South Carolina's one, and there's one up in New Hampshire, and I never can remember the other one. We've heard from Japan, Sri Lanka, Canada of course, and so I guess my message is that there's a wide interest in this.

MS. STEMBRIDGE: Okay. Beverly?

MS. WALKER: This is Beverly Walker. When did the brochure or flyer -- when was it mailed out? I didn't receive one.

MS. HAARS: It would have been the end of March, and it would have looked like this. You didn't get one? We can get you one.

MS. WALKER: Thank you.

MS. HAARS: We do need to talk, because we sent it to people that had responded, sent in --

MS. WALKER: That's my concern. If I didn't get it, other people didn't get it, too. Because I sent back my questionnaire, and so I'm wondering who else --

MS. HAARS: Yeah. We can check and see if you're in the computer system.

MS. WALKER: Thank you.

MS. STEMBRIDGE: Judith?

MS. JURJI: Yes, Judith Jurji. Back to Van and Greg, regarding the CDC HTDS public meetings. I've written down a concern and a question that then Van can take back. Why wasn't there a meeting of the HTDS Advisory Board before the meetings with the public, so that that group could advise CDC regarding getting the word out about the public meetings? Because the word, really, I don't think got out sufficiently. I'll get that question to Van to take back. But we never really did hear from Greg about that Spokane meeting, and I specifically just wondered what kinds of questions or concerns people did express at that, the Spokane meeting.

MS. STEMBRIDGE: Very quickly.

MR. THOMAS: Very quickly, the Spokane meeting was probably -- there were fewer people at the meeting than at the Seattle meeting. There were maybe 15 to 20 people at the meeting. Although the difference between the two also was that, in Spokane there was lots of media coverage, and I didn't see that at the Seattle meeting. I thought the presentations this time around were very well done, from the standpoint of being well-rounded. I thought the Fred Hutch staff did

a fine job of explaining their findings and the results of HTDS and defending them. But the CDC staff also did a fine job of spending time talking about the limitations of the study and of epidemiological investigations in general. And I thought that that piece was missing from the Tri-Cities presentations. And that piece probably caused a lot of the concern from the original announcement of the findings from the work.

There continued to be lots of concern about statements that were made in the Tri -Cities, and I think that was kind of an overriding concern in the questions that were brought up afterwards, concerns about the definitiveness of the statements that the staff was making, and concern that the message that was being given out to the public wasn't very sensitive to their experience. And that, briefly, was most of the questions that came up in Spokane. Trisha was there, and she maybe has a better --

MS. PRITIKIN: I like what you said so far, but there was -- it was a very -- it's been described as a very hostile meeting. It was very verbal. And I think one of the principal points that Greg didn't mention was that one of the main points voiced by the public was that this study, which is supposedly in draft form, was being portrayed as conclusory, both by the national media and by Fred Hutchinson. And that was one of the major complaints voiced by the public at that meeting.

MS. STEMBRIDGE: Elke, and then we're going to move on to Mr. Briggs.

MS. SHAW-TULLOCH: I just wanted to say that I have kind of an understanding of the CDC task order process, as well as some updates about the HEDR task completion work that's being done, and wanted to know what work group session to bring that to.

MS. STEMBRIDGE: I believe -- correct me if I'm wrong -- but the HEDR task completion has been housed within the Studies Work Group.

MS. SHAW-TULLOCH: Okay. Shall I address the other with you also? Okay.

MS. STEMBRIDGE: Roger Briggs, you are the next on the list.

MR. BRIGGS: Roger Briggs, Department of Energy Regional Operations Office. I'll be brief. I just think I need to mention, although I'm sure all of you may already aware of it, the draft agenda for Public Health Activities for fiscal years 1999 and 2000 at U.S. Department of Energy sites is now out for public comment. Notice in the Federal Register on Tuesday made that a public announcement, although I understand that you all may have copies of that now in your hands, so -- and if you've looked at it, you will notice that the Hanford piece of that is about eight pages or so. And in that, there is a description of studies that have been done with some of those results, a mention of studies that are ongoing, and also a proposal for new studies or future studies for the years 1999 and -- fiscal years 1999 and the year 2000.

It's very important, I think, that all groups who have concerns and issues with Hanford health studies need to take a close look at this document, and there is an opportunity to provide comment. Those comments, by the way, need to be submitted by June 30th, 1999. And I'm trusting that you have the information, so you know the mailing address, and the fact that these documents are on

three different Web sites, the ATSDR, CDC, and DOE. And that's pretty much what I have to say. If you have any questions, I'll be glad to answer them.

MS. STEMBRIDGE: Judy?

MS. JURJI: Not a question, but just to remind people, I'm glad you brought this up, Roger, because the Hanford section's not that big, as you said. And it does include discussion of the Hanford Medical Monitoring Program and the iodine subregistry, so it is real important to look at this and comment on it.

MS. STEMBRIDGE: This is another little item that can go onto the PHAWG's agenda. Steve, I understand you have some overheads and about a ten-minute update for us on NIOSH activities.

DR. AHRENHOLZ: Thank you, Lynne. Good morning. I'm Steve Ahrenholz with the NIOSH Health-Related Energy Branch in Cincinnati, Ohio. And I'm just going to give you a quick update on three studies that we have, and what their current status is. The first one is the multisite case control study of lung cancer and external exposure to ionizing radiation. The protocol has completed its internal review. It has been sent to the various reviewers, including the identified contact with each of three health effects subcommittees, that is the Savannah River, Hanford and Idaho. And one of the things that the research team wanted me to do was express its appreciation to HHES and Glyn Caldwell for getting the comments back to them so promptly.

The draft protocol has also been distributed by DOE to the prime contractors at the different sites for review comments of theirs. ^ Sonny Trenti is serving as the contact point for review comments from labor out here at the Hanford site. And we are going to be having our external protocol review in Cincinnati May 24th, and Glyn Caldwell and Armando Trenti will be there for that. The makeup of our external peer review or protocol review panel consisted of three scientific reviewers. One is an epidemiologist, one is an industrial hygienist, and the third is a health physicist. We have health effects subcommittee representatives. Glyn Caldwell is the Hanford Health Effects Subcommittee representative. We have Elaine Hogan from the INEEL Health Effects Subcommittee, and Sergio ^ Bustos from the Savannah River site. For labor representation we have contacted labor contacts with 104 unions at four different sites, and are requesting input into the identified labor point of contact at each of those sites to come in to -- or I should say, to submit comments to the study team for their consideration, as far as revising the protocol.

Briefly, the proposed study question for this project is, what is the relationship between protracted occupational exposure to external ionizing radiation and lung cancer mortality. The sites that are proposed are identified here. We are looking primarily at people who worked in the reactor areas. We have the Area 100 in both Savannah River and at Hanford. At INEEL we're looking at the Naval Reactor Facility and the Test Reactor Area. And then at Oakridge National Lab it include the X-10 part of that facility. Study design features are that this is looking at nuclear reactor area workers. Primarily the interest is in having their exposure or potential exposure profile as clean as possible. And by "clean as possible," I mean that ionizing radiation exposures would have been predominantly from external radiation, rather than sources which could have presented an internal exposure hazard, and also the number of chemical contaminants is less. Multisite feature

maximizes power, and case control aspect of it allows a more thorough exposure assessment of those included in the study.

Moving on to the next study that we have currently in progress, it is the multisite case control study of leukemia and ionizing radiation. The protocol for this was actually peer reviewed and approved back in 1996. The current status of it is that there is mortality information being validated for five rosters. That actually includes six cohorts, but for the Los Alamos site it includes the site roster and then also the ^ Zia cohort. This study will have about 1250 study subjects, it's going to be utilizing four controls per case, and the investigators evaluate -- the investigators estimate that about 40 percent of the study cohort will come from the Hanford site. There is currently a pilot validation going on for the health physics data. What this entails is a verification of paper records against the electronic files that exist for radiation dosimetry.

For the Hanford site we have acquired 1750 rolls of microfilm which actually have the paper copies microfilmed onto them, and those are being used to compare some of the data that's showing up in the electronic file. The other activity that is going on is an evaluation of the comparability of past monitoring and recording practices at the various sites for the study population. We anticipate cohort assembly by late summer and case control selection by late this year. The proposed study question for this study actually goes, is there an association between leukemia mortality and cumulative external ionizing radiation exposure for U.S. DOE and DOD site workers.

The "DOD" part comes from the fact that the Portsmouth Naval Shipyard is included in this study, as far as they're drawing upon that for part of their cohort. I have identified the cohorts here. Study design features are listed under the third bullet. It does utilize previously studied cohorts. It's bringing them up to date, as far as the mortality experience is concerned. Women and nonwhites are included.

In order for an individual to be included in the study cohort, they have to have worked a minimum of 30 days at one of the sites, and they have to be in the "ever monitored for radiation" group. Down here we've got that it's a nested case control design that they will be using for controls for every case.

The last study that I wanted to touch on -- this one is not as far as along as the previous two -- is the DOE Construction Worker Mortality Study. This one is still in the protocol development stage and, as you'll recall from the last meeting, Travis had at that point requested that the committee also identify some potential candidates to provide protocol review when we do have that protocol finalized, as far as its being ready for protocol review.

We are in the process of exploring construction worker cohorts at some different DOE sites, and the availability of their dosimetry data. And we are determining the ability to obtain dosimetry data and work histories, for identified workers at the Hanford site, from their radiation exposure dosimetry database. This is a database that's maintained by PNNL. And that's what I have for study updates.

The other thing that I did want to comment on, and it is more of an affirmation of a request that Buck made earlier this morning, and I think that -- I'm hoping that he will have the opportunity to discuss with you some of the information that he and Rachel and Judith have received. We are pleased that they are going to go to the Health Effects Work Group meeting the 24th and 25th of May, as the eyes and ears for the health effects subcommittee, and share with you what they learn.

They have all received a package of materials which presents what this group has been engaged in so far, and there are some things in there that I think they probably will want to share with the overall committee, because they would like to go back or -- the working group is interested that they have some of the background understanding of what's all transpired to date, so that when they are there for those working days, they can work from the perspective of some preparation of what has transpired and some insight as to what the things are the other committees have been working on. Ellie has been involved with it from the INEEL Health Effects Subcommittee perspective, and she probably would be a good person to provide some insight from her experiences, and I'd encourage you to ask her, if you have any questions, as well. And with that, that's what I have for on an update. If there's any questions --

MS. STEMBRIDGE: Linda, I see that you have a question. Just for folks' information -- and the continuing, can we possibly shoehorn more and more into the agenda than is already packed into there -- what I think we should try and do is, after the Native American Risk presentation this afternoon, but before we break into our work groups, I think it would be useful to provide that window for Buck and Judy and Rachel to update everyone on what has transpired since the conference call about the national evaluation process. What I am hoping that each of the work groups can find time to do is come up with two or three bullet items that we, as a subcommittee, would feel should be incorporated into the national agenda process; some kind of benchmark so that we can finally -- so that we can see if what we need might be available within that national evaluation. I don't think it needs -- we don't have the time to make it an extensive list. I think many of the concerns we all expressed in December in Salt Lake are still valid, but we're going to try and shoehorn a few more things into the afternoon agenda. Linda, did you have a question for Steve?

MS. KIER: Specifically, I saw one of the items was that you were in the process, I believe, of obtaining data -- worker data from the PNL, is that correct, Pacific Northwest Lab?

DR. AHRENHOLZ: Well, let me look at that transparency.

MS. KIER: It's the next-to-the-last bullet item, I think.

DR. AHRENHOLZ: Okay. For the leukemia one or the mortality one?

MS. KIER: I think it was mortality. I'm sorry. I just wondered if there was any problem in obtaining worker data from Pacific Northwest Labs. The reason I ask this is because there had been a lot of criticism, that our group had heard, about the HEDR data, in terms of getting sufficient data for dosimetry -- partly because of the age of the records and so forth, going back over 50 years. And I just wondered if there was any problem with lost records or any problem with Battelle handing over data.

DR. AHRENHOLZ: No. This is more from the perspective of determining the ability to obtain dosimetry and work history data for the identified workers. So basically what they're trying to do is, in contact with PNL, determine if they have that data for those workers. They've identified some people that they're trying to find and see if those people were, A, monitored, and B, if they have data for them.

MS. KIER: Okay. So there may or may not be existing records?

DR. AHRENHOLZ: Right. And that's what they're looking to see: What is the availability of information for this group.

MS. KIER: Okay. Thank you.

MS. STEMBRIDGE: Herman and Buck, very quickly, and then we're going to move on to the Thyroid Disease Study.

DR. CEMBER: In the slide that you showed dealing with the cancer mortality, the question is, "What is the relationship between exposure and lung cancer mortality?" And in the one on leukemia, the question is, "Is there an association?" It seems to me we should be asking the same kinds of questions. And is there a subtle difference between these two, and would that subtle difference appear in the design of the study?

DR. AHRENHOLZ: What you've got here is a compression of the hypotheses that are presented in the protocol, to get them on a transparency. So I haven't really thought about the difference, as far as using "what" versus "is" at the beginning of the question. What I'd have to do is go back and just look at the protocols themselves. What I tried to do was condense about five or six sentences into something that I could bulletize on the slide here, so I think this is probably some fallout from that.

MS. STEMBRIDGE: Buck?

MR. CAMERON: Have you already made the connections with PNL, as to who you're going to get the data from?

DR. AHRENHOLZ: I don't know who -- Cindy Robinson is the lead project officer on that, and I don't know who she is dealing with.

MR. CAMERON: Okay. Because I obtained that database from -- I believe it was Jeff Buchanan at PNL, and he was very helpful. He is located out at Richland. There was about 1800 names on that database, including some diseased personnel, which is a pretty small fraction of the total construction workers, whoever worked on the site.

DR. AHRENHOLZ: Okay. Yeah, thank you. I know Jeff. I'll check with Cindy and see who it is that she's been dealing with.

MS. STEMBRIDGE: Very quickly, Jude.

DR. VAN BUREN: Steve, I just wondered, what is the difference between the cases and the controls in both of these studies? Where are the controls coming from?

DR. AHRENHOLZ: The controls are coming from the various sites, as well.

DR. VAN BUREN: So how is their exposure determined to be less?

MS. STEMBRIDGE: I'm going to have another little traffic cop moment here, and request that you either talk to Steve off line, or that this goes into the studies group, and move us along into our next agenda item. But thanks, Steve, for being so concise.

DR. AHRENHOLZ: Okay. I'll talk to you later.

MS. STEMBRIDGE: As you may recall, at our last meeting we set before ourselves the task of trying to develop some sort of consensus comments to submit on the Hanford Thyroid Disease Study draft, which was released in, I guess, late February -- seems like forever ago. And at our last meeting we determined that it would be useful to have directly available to us some people from Fred Hutchinson, to ask some final clarifying questions of them before we move into trying to formulate our subcommittee comments. And that is our agenda item before us at the moment. And I'd invite Scott to come to the -- I don't know whether that's the front or the back, but the end of the room with the screen. I'd like to ask people to make your questions as concise as possible. And I'll also, I think --

MR. DAVIS: Good morning. Is this on?

MS. STEMBRIDGE: I think what I would also like to ask is that the responses to the questions could be fairly brief. Let's try. Let's try and be brief first; and if whoever poses the question feels that, for some reason, the answer was not enough information, they can ask a follow-up question. But I want us to try and err on the side of brevity, rather than length, so that we can be sure and cover everything, everyone's questions within this hour. So with that, I will turn the floor over to Scott.

MR. DAVIS: Sorry, this is a little awkward.

MS. STEMBRIDGE: It's more than a little awkward actually.

MR. DAVIS: My name is Scott Davis. I'm with the Fred Hutchinson Cancer Research Center, and my colleague, Ken Kopecky, is here with me. He is a coinvestigator on the study, and the two of us will try to answer your questions. Maybe we could bring chairs up to the table.

MS. STEMBRIDGE: I think we'll just follow our standard subcommittee process and, if you have a question, raise your card and we'll just go around. Del, you can start.

DR. BARTH: Yes. I would like to ask your opinion on the feasibility of any additional analysis efforts on the data which have been collected, over and above the reason that you stated in the

protocol for collecting the data. You have collected a tremendous amount of data, and you could stratify these data in various ways.

And as an example, could you not stratify those people who have thyroid disease, that you discovered, to determine whether or not there is a lumping of the latency period for those people who actually have the disease? And if it turns out that, for example, there would be clumping around a certain amount, it would give you a suggestive study that something happened at a certain period in time, which then caused that particular thyroid disease. It would be suggestive; it would not be conclusive. But what is the feasibility of this kind of an approach?

MR. KOPECKY: I'm Ken Kopecky. If you're referring to stratification on the basis of when diagnosis occurred, I don't think that's very promising in this setting, because of the fact that we have a very large screening effect at the time of our examinations. Perhaps the one very good and important example of this is thyroid cancer, where of twenty cases that were diagnosed in the entire study, only six were diagnosed before the study. So only about a third of the cancer cases do we have a date of diagnosis, other than the sort of artificial date of the study itself. So I don't think there's much promise in that. In some of the disease standpoints, there's even a much stronger screening effect.

MS. STEMBRIDGE: Louise?

DR. KAPLAN: I'm interested in knowing how the review process influences your work, in terms of we know that NAS is doing a study, and that there are comments being sent to CDC. And the materials that were sent out from the Fred Hutchinson didn't say that this was a draft final report. CDC said later that they should have done that for their own publications. But what I'm interested in knowing is, if you take the comments that are sent to CDC and make revisions based on those comments, or what you do with comments from here on in.

MR. DAVIS: Absolutely. The process will be as follows. A number of different reviews are ongoing or have occurred, beginning with the initial internal CDC review which included, as you know, a number of people from the scientific community outside of the CDC. The NAS is now reviewing, the public is reviewing, other independent scientists are reviewing the draft. All of these comments will be collected, provided to us. We will go through each and every one of them carefully, and incorporate into the report -- or into additional analyses, if called for -- the suggestions that come from all these various sources, and revise the report so that, when the final report is issued as the final deliverable document to the CDC, it will have incorporated the suggestions, comments, criticisms from all of these different sources at once. We haven't worked out the complete details yet, but there will also be some sort of response document to the comments themselves, separate from the final report as well. So it's a long-winded answer to say, yes, these comments and criticisms are going to be looked at carefully, each and every one.

DR. KAPLAN: Is there a time line for that?

MR. DAVIS: The CDC has established July 1st as the date, the end date for the public review and comment period. There is no set date for the NAS review, so we will, if that -- you know, if the report from the NAS is after July 1st, we will wait for those comeents to come in before

proceeding. But I would certainly encourage this group, and anyone that you talk to who would like to make comments, to please do so and provide those to the CDC by the July 1st date.

MS. STEMBRIDGE: Judy.

MS. JURJI: My question has to do with the so-called screening bias that was mentioned regarding the incidence of thyroid disease that was found in this population. And I was wondering if you've already collected or are collecting or will be collecting information or data to back up that statement that the thyroid disease -- the high incidence of the thyroid disease, or at least high from the way I look at it, is the result of the screening bias, or if this is what you would expect from a middle-aged population if you were to study them somewhere else. And so what data have you collected to really support that, number one; and number two, is it possible, at a late date like this, to actually bring -- do a little added study that could look at a middle-aged population of people that were unexposed and what their incidence of thyroid diseases would be, or is that out of the realm of possibility?

MR. DAVIS: Okay. Let me answer your second question first, and then I'll let Ken address the first part. Certainly that kind of study would be feasible. It might be very useful. It would certainly produce some interesting results. In order for it to be most useful, I would recommend that something like that be done as closely as possible to the same exact methodology used in the thyroid study. So what that would mean, of course, is that it would be a rather expensive, time-consuming undertaking, depending upon how many people you wanted to investigate. But certainly it's feasible, if the funding was available and the interest was there to organize such an effort with a completely separate population, completely away from the 49 Northwest perhaps, or some suitable location, and do it exactly the same way.

MS. JURJI: Do you feel the numbers would have to be the same as the number of people tested, to get some answers about this?

MS. STEMBRIDGE: Judy, I couldn't hear your last question.

MS. JURJI: I was just wondering about the numbers of test subjects that you would have to have to really kind of answer the question. Would that have to be the exact same number, or statistically -- ?

MR. DAVIS: I think we're probably -- off the top of our heads, probably not. I don't think we would need that many people.

MR. KOPECKY: Just one other comment in that regard. Another important part of that would be to try to identify a population, and verify in some way that they really do have the same so-called background risk or natural risk of thyroid diseases as the population we're looking at. Differences in diet, differences in genetics conceivably could affect rates and be a factor that would make the comparison inaccurate one way or the other. So that would be an issue that would have to be thought about very carefully, too.

MS. JURJI: That brings the question, did you really have a good understanding of what the background rates and the diet, all those issues you brought up, genetics and so forth, with this Hanford exposed population?

MR. KOPECKY: And that's sort of related also to your first question, too. Not a great deal is known about many of those factors. And the one -- the way one tries to do deal with that in these sorts of studies is by focusing on as uniform a population of people as possible. People who are born and live in the same areas at the same time are probably more likely to be similar than people who are born in different parts of the country or at different times and so on. There are no absolute guarantees about any of this.

And this -- I think, touching back on your first question, too, we have had in the protocol for thyroid cancer, you may recall, we did calculations of expected thyroid cancer rates and benign thyroid nodule rates, based on population-based registry data for the Northwest, and using some factors to account for the screening effect that were reported by NCRP in one of their reports of a few years ago. So those sorts of data are available. As it turned out for thyroid cancer, the rate that we saw in the studied cohort was almost -- very close to what we calculated in the protocol at the beginning. I think the fact that it turned out to be very close is not particularly compelling, but it probably represents a certain amount of coincidence, as well; but nevertheless, the overall rates were in line with what we would have predicted. We addressed in the draft report the information that is available on rates of other diseases and ultrasound -detected abnormalities, for which there is some literature, as well.

And as I think is summarized there fairly well, we don't see any evidence for all the comparisons that we can make, that these overall disease rates are out of line with what one can predict. So we'll -- in revising the final draft protocol, we will be updating that information to bring in anything else that we can learn about.

MS. STEMBRIDGE: I have Trisha next.

MS. PRITIKIN: This is for you, Scott. This relates to an issue that was raised by Rudi Nussbaum and several other PSR physicians at a conference several weeks ago here in Pendleton, in which they looked at 801 health questionnaires from downwinders. And although this was admitted by these three folks as not being anything one could rely on scientifically, they did find a significant incidence of early onset thyroid disease, juvenile onset. And I wanted to find out if the HTDS raw data allows you to go back into that data to find out earliest symptoms of people who are found to have thyroid disease, or whether the information from the study cohort only reports date of diagnosis.

MR. DAVIS: Well, this relates back to the difficulty that Ken mentioned a minute ago regarding the ability in this study to identify a date of diagnosis that truly reflect onset of disease, which would be a very important factor in trying to cull out a group of juvenile onset disease. We certainly attempted to do that, from everyone for whom we retrieved and could review medical records. And we spent a considerable amount of time and effort to establish, from the records, a date of diagnosis for those people. Unfortunately, as Ken pointed out, because of the nature of so many of the different types of thyroid disease that can go undetected for long periods of time, the

largest majority of cases in each one of the categories of thyroid disease were diagnosed because they came to an HTDS clinic.

So we just -- I guess the bottom line is, we're really not able to do an analysis that would accurately, at all, reflect juvenile onset.

MR. KOPECKY: Could I make one other comment? Also you may recall from the draft report that, for each of the disease outcomes, we had a variety of alternative definitions of what would qualify as a "case" in the analysis. And for all of the disease outcomes the widest, most inclusive definition was basically any mention by the participant or the respondent, on the dosimetry interview or from medical records or from our examination, any indication of any of those sorts that the person ever had a particular disease, that applied in particular to the hypothyroidism. So we do have analyses in the draft report that include every case of hypothyroidism, even if it was just based on the participant's report, and there is no existing medical record documentation that we could look at.

So that, I think, is sort of an outer bound, if you like, that probably includes all of the juvenile hypothyroidism cases that the participants were aware of, where they had a recollection that a doctor told them that they had hypothyroidism.

MR. DAVIS: And I might add that that, then, might be most comparable, in terms of reporting source, to the data that Dr. Nussbaum reports.

MS. PRITIKIN: Can I please just follow up with one final question? The reason why I bring this up is, I have an interesting case of this, because my first symptoms appeared when I was 16 or 17 years old. But if you asked me -- if I had been in that cohort, and you had asked me for the date of diagnosis, it was 1988, because we didn't find out a correct -- we didn't find out about the radioiodine until 1986. So I would show up as a 1988 diagnosed hypothyroid, but I actually had symptoms in my teens. And I think that's what Dr. Nussbaum was trying to bring up, that it's very interesting. If you see a significant incidence of early onset thyroidism, that would be very important to the results of the study.

MS. STEMBRIDGE: Linda?

MS. KIER: When you compared your high and -- relatively high and relatively low dose population related to Hanford -- and as I understand that, you would base it on the HEDR model, which has sort of a footprint distribution of the source term data. Is that correct?

MR. KOPECKY: Yes, it did, although our primary analyses are based on individual dose calculations, like the IDA project calculates for individuals.

MS. KIER: And the high and low would be -- as I understand it, basically related, though, overall to that footprint, in terms of distance from the source.

MR. KOPECKY: Well, it takes into account distance and --

MS. KIER: And diet, of course.

MR. KOPECKY: -- diet and milk consumption, in addition to the distance factor.

MS. KIER: I should have said "in lifestyle," in addition to the distance factor. In light of the information we have received, and which data apparently had been fairly complete for about 14 years and had been suppressed by the National Cancer Institute, with regard to the Nevada Test Site; and we know that huge plumes -- in some cases of county-by-county dosimetry, the estimate was several rads -- I realize that in some senses the Pacific Northwest didn't get as much as points east, but still, there were areas of the Pacific Northwest -- Idaho, Western Montana, Eastern Oregon and Washington -- which did receive multirad doses. I don't want to complicate this question too much, but it's hard for the layperson to see how you can still keep the distinction and power in your relatively high versus relatively low, when you have other source of dose, unless you were to figure -- as I understand the SENES group has figured, as opposed to the RAC group -- of dosimetry specialists, and the RAT group did the HEDR data upon which yours is based. Some of the Columbia River data was reviewed by SENES and some of the Oakridge data was reviewed by SENES. And they were able to get, in terms of the presentation we were given in Utah in December, they were able to get a much more topographically and meteorologically refined dosimetry map, so to speak, source map. How can all these different doses, where they overlap -- how can the layperson understand the power of your analysis when, due to factors beyond your control -- because you are basing your study to a large degree on that dosimetry -- how can you retain that distinction and power, when you may have multiple doses to the individual from multiple sites, which may be significant in relationship to the difference that you're trying to bracket? It's a complicated question, but I think you can see what I mean.

MR. KOPECKY: Yes. The approach that we took in analyzing these data, to deal with the doses from the Nevada Test Site -- and also, parenthetically, it's also the approach we would use to deal with the possibility of other, for example, medical radiation exposures or dental radiation exposures of the thyroid gland -- because our charge and our primary focus here was on the effect of the iodine from Hanford, we did analyses which looked at the possibility that these other exposures -- say, the Nevada Test Site exposure -- might be what's called either a confounding factor or an effect modifier. And basically what those analyses attempt to do are as follows.

First of all, we did calculate an estimate, for each participant in the study, of their dose from the Nevada Test Site, so that we would have that information. The average -- and this is something that we will probably expand upon in the final report, because it is dealt with very briefly in the draft. The average dose from the Nevada Test Site that we calculated, the mean was about one rad for the study participants, and the median was about a half a rad. There were -- and I forget the exact number -- on the order of ten or less study participants who had Nevada Test Site doses over ten rad. So that's the range of doses that we're dealing with, compared to, in rads, an average estimated dose from Hanford of about 18 rad for study participants, and a maximum of a little over 280 rad.

So let me -- so in the analysis basically what we do, in effect, is among people -- among study participants with similar doses from the Nevada Test Site, in effect we stratify on the Nevada Test Site dose. So we make our comparison of the effect of the Hanford dose among people with

similar Nevada Test Site doses, and see whether, when we control for the Nevada Test Site dose in that way, do we then see evidence of an additional effect, if any, of the Hanford dose. And that's the kind of analysis that we did to try to sort that out. It is rather technical, and it's a difficult analysis to sort of get a good grasp on, but that was the approach we took .

MS. KIER: Thank you. And can I just follow up with that, and then I'll -- I know there's other questions that people want to ask. In light of the criticisms that have been published in the the Cascade Alliance and elsewhere, specifically from SENES as a follow-up, and as early as 1994 when HEDR made the announcement of its findings in Pasco in April of '94, there were criticisms from ^ Brian ^ Berry and ^ Allan ^ Benson and other people who had studied these issues, dosimetry issues, that they felt the source term and dose -- and hence, risk -- was underestimated. For example, fetal doses would be perhaps a factor of ten times the risk, as opposed to a school-aged child, for example. There would be almost an order of magnitude. And similar criticisms have come from SENES. Can you quickly respond to that?

The downwinder public, when they see a result like your draft result, which is not really much of a significant difference between low and high with regard to Hanford -- they ask themselves, well, did this whole thing just get averaged out with other doses, or how does this -- how can you respond to that, when other critics are saying you're really dealing with a much higher source term dose?

MR. KOPECKY: The quick answer would be that, no, I don't think the effect, if any, on the Hanford dose is averaged out, because of these analyses of confounding and effect modification that we did -- which looked specifically to see if that's happening, and we didn't see evidence of that.

As far as the notion of risk and/or dose being under- or overestimated, in the context of this study, now that we've collected the data -- and we have the numbers of persons with the various disease outcomes -- if you make some assumption that the dosimetry should be revised in a certain way, which increases the doses or decreases the doses, the number of disease cases will stay the same. If the doses are larger than if there was evidence of a risk, in relation to dose, that risk would actually be smaller per unit dose, because you have the same number of diseases with more dose. If the dose, in order for an estimate of the risk to increase, the doses would have to be smaller than we got in the study.

MS. KIER: I understand that, but then your confidence bound can be orders of magnitude. You know, when you take an average or a mean, and you could have tens of rads of difference within that bound of maximum and minimum. So if that's so broad, if that maximum and minimum is so broad, it seems to the average person that it's very difficult to get a high-low comparison that is significant. And when you add to that additive doses that are different for each individual person -- you point out that you're trying to deal with individual risk and dose, as the IDA project is doing -- it seems that it's very hard for the downwinder public to see how you can find very little significant difference.

MR. KOPECKY: I'm not --

MS. KIER: If your bounds from high and low and maximum and minimum are so wide --

MR. KOPECKY: Bounds on what? On risk or --

MS. KIER: Individual doses. And of course the risks could come in again on a factor of ten if a person's dose was received at age ten or fetally.

MR. KOPECKY: I'll comment on that last part about age at exposure, or age perhaps when the highest exposure occurred or first exposure occurred. We did do these kinds of confounding and effect modifying analyses to see if that might be happening here, and we found no evidence of that. In terms of -- now I lost the thread. I'm sorry. I lost the first part of your question.

MS. KIER: I don't blame you, because -- I wish I could tell you I have read all of -- I wish I could assure you that I have read every single one of the elaborate technical details of how you've tried to compensate for factors. And I admit that I didn't understand everything in what you tried to present. So when I'm asking questions, it's somewhat as a layperson, and of course it's the layperson to whom we are all ultimately answerable.

MR. KOPECKY: Absolutely. And these are why the review process is helpful for us, too, because we want this report to be as widely understandable as possible, as well, and finding out where it's not is very helpful. The question regarding uncertainty of doses -- and again, this is sort of a technical answer -- but basically, in order for large errors in the estimation of risk to occur, it would have to be the case that the dosimetry system fails to even roughly distinguish low from intermediate from high doses.

So if -- in other words, if the dosimetry system was a total disaster, and it couldn't really tell whether a person who had a very high exposure had a very high exposure, whether it accurately estimated that down to one percent, but at least put them up in the high dose range, and a person with a very low exposure, put them down in the low dose range -- if the dosimetry system couldn't even do that, then yes, that would really tell you that probably the risk estimates are not very helpful. I think there is reason to believe that the HEDR system does work, at least well enough in distinguishing relatively high from relatively low exposures, because it takes into account exactly those things that clearly play a role in exposure.

MS. KIER: Thank you. I tend to disagree with your confidence in the HEDR data, as well as the HEDR model, but I do thank you for your answer. And I'll quit here and let someone else.

MS. STEMBRIDGE: Jude? Louise, I know your card is up, you and Judy both, but I'm going to hold yours until other folks have had a chance.

DR. VAN BUREN: I think the study has done an incredible job of tracking people. It's amazing how much effort was put into 45 phone calls in some cases to find people, and I think that was a real challenge. I think the major concerns I have are regarding this classification, and I think Linda and others have mentioned those. And one reason is that the footprint of HEDR includes Ferry, Okanogan, and Stevens County, which is where your controls came from. And the concern -- excuse me -- there were some corners, little corners.

MR. KOPECKY: The people from those counties are not considered controls, though.

DR. VAN BUREN: They're not?

MR. KOPECKY: No.

DR. VAN BUREN: I guess the concern being, given the caveat of whether or not HEDR is the best model we have or the best model possible, the concern is, are we really confident that a continual low dose exposure cannot cause thyroid disease, in that the dose response is based on the fact that everyone received a low dose, and so it's a low dose/high dose consideration is really with the caveat that that increment, that bottom increment is not there, because everybody's there. So I guess that's a misclassification concern.

Let me just state the others, and then you can -- the other is the dietary methodology, the memory -- the protocol and the methodology for diet looks very good; however, I don't see any internal validity, any assessment of the internal validity of that, nor documentation of the literature. ^ Don ^ Dillman's work is not even cited, and ^ Willet and others who have done the nurse study, and others, are not there. So if you did not know anything about dietary methodology, or accepted, there is nothing given to the reader to say, yeah, this is a good method. And there was also no -- that I could see in the draft -- validity test on whether or not people were actually reporting and recording. And I know IDA -- you know, they've got some doses, and whether or not -- they don't have a question. They deliver that dose, whether or not they believe it or not, because their job is to just deliver the dose. However, the lack of validity and testing, that is a concern.

And the other is whether or not the HEDR model is really capturing Iodine-131 airborne exposures, but it really isn't capturing the river exposure of iodine. So the statements that there is no relationship, statistically significant relationship, is really only an airborne issue, as the riverborne pathway has not been completed. And those individuals who might have had very high exposures to the river -- Native Americans probably are included in there, they are people who are there -- but that river pathway has not really been addressed, and yet that could be a very large pathway for some individuals. So those are the concerns.

MR. DAVIS: I think I'll work backwards. And you're absolutely right on your last point about the river pathway. And again, these are the kinds of comments that are very helpful to us, because we do need to look carefully and make sure that things are very clear in the final report, that this is relevant to the airborne releases. You're absolutely right. You're also very right about concerns in the determination of dietary patterns and particularly milk consumption. From the very beginning, we knew this was going to be a significant challenge, to try to obtain the kind of detail that is really necessary to begin to distinguish people 50 years after the fact. And your comments are helpful, in terms of better documenting some of the literature. I think that's a very reasonable comment. But I would also just like to point out that we really had to do something even more, in terms of a methodological attempt to capture this information. The standard approaches that have been used for dietary questionnaires and dietary assessments in epidemiologic studies, like those that Willet and others have perfected, quite frankly, would have limitations and be suspect, in trying to go back that far.

And as you probably know, we tried to modify those methods by bringing in this concept of the cognitive interview and the cognitive approach, and we had some very fine people help with that, including Dillman and his group. But the bottom line, in terms of having any objective goal standard to really compare to and validate in the true sense, whether or not you're getting the right answers, is impossible. There is no such thing. So one way we tried to deal with it -- two ways we tried to deal with getting a handle, at least, on whether or not the information we were collecting from the interviews regarding milk -- and especially, was it just completely wrong or not -- was to, one, look at the information that had been developed by a number of people working on the milk pathway for the HEDR project, in terms of food basket survey data from the early years, to see whether or not we were coming up with consumption values that were completely different from those. And there was no evidence that that was the case.

The second attempt was to use HEDR default values in analyses, rather than our questionnaire data in analyses; that is, we repeated all of the analyses as though we had never done the interviews, and used only HEDR default data, which were based on these food basket surveys, to see if the results were any different, and they weren't. Those were the two ways we thought we could best handle that, you know, short of a good validity check. And the first question was about misclassification of dose, and I thought maybe Ken could take that.

MR. KOPECKY: Yes. Could you --

DR. VAN BUREN: Well, the controls were out of Ferry, Okanogan and Stevens County.

MR. KOPECKY: No. There were no controls in the study. This was an internally controlled study. It's a dose response analysis, so a person who has a low dose, regardless of where they came from, has a low dose and that's where they are.

DR. VAN BUREN: Could I ask one more question? In the final analysis there were 3,448 participants, and then you had to break that down to about 13- or 1400 because you couldn't differentiate high and low dose, so the final -- I mean, that was --

MR. KOPECKY: That was two alternative analyses that we did, so as not to use the HEDR dose estimates. Those were laid out originally when we planned this study, because back then, before HEDR had even completed its first phase, we couldn't be sure that there would be individual dosimetry systems. So we said in the protocol that we will also look at doing other analyses not based on individual dose estimates, as best we could figure out to do.

So what we ended up doing were two of these kinds of analyses, one of which was just a comparison of people who were born to mothers living in Ferry, Okanogan and Stevens Counties to those who were born in the close-in counties, being Franklin, Adams, Walla Walla. And the other, which is, I think, the analysis you're referring to, where we tried basically to refine that a little bit. Clearly, a person born in close, say in Franklin County, didn't necessarily get a high dose. They may have moved away; and a person born in Okanogan County could have moved in close and gotten a high dose. So that obviously has a lot of uncertainty in it.

So we tried to refine that general type of comparison by limiting it to people in what we called the low exposure group, who lived at least six months during 1945, the year of the highest releases in Okanogan, Ferry or Stevens County, or in Walla Walla County and drank less than a glass of milk a day; and compared those to people who lived in Benton, Franklin, Adams County, at least six months, and drank at least a glass of milk a day. Now, there are a number of people who don't fall into either of those categories, so that's how you get from 3400-something down to only 1300. And that's obviously one of the big disadvantages of trying to do this analysis. So in that alternative analysis we didn't find any evidence that the dosimetry system was leading us astray, but on the other hand they're really not very conclusive either, because you have such a small group of people left, or there's -- we still know that that's really not necessarily a good surrogate for the actual doses.

DR. VAN BUREN: Thank you.

MS. STEMBRIDGE: Darrell.

DR. FISHER: Thank you. I don't speak too much during these committee meetings because I'm a relatively new member, and I'm learning some of the people and the ropes and how this procedure goes. But I have read your report and the summary report, and I have it with me. I have a series of questions, and I'll try to make them very brief, but I'd like to see if I can get very specific, short answers to these questions. My questions relate to the methods, the study design, the validity of the results, and the conclusions. This was an extensive and expensive report that took several years, right?

MR. DAVIS: That's right. It began in 1989 in the fall.

DR. FISHER: Would you say that you gentlemen -- not just you two, but also other members of 9 your team -- are professionally qualified to conduct this kind of an epidemiological study?

MR. DAVIS: I certainly would.

DR. FISHER: Do you have the proper credentials, peer review publications, good professional reputation?

MR. DAVIS: Yes.

DR. FISHER: Do you believe that this study was conducted by the most competent team that could be assembled to do this kind of work?

MR. DAVIS: I certainly do.

DR. FISHER: Some of my questions follow from several hours of statements that were made at the last meeting I attended of this committee in February in Kennewick, Washington. For example, one of the questions by one of the speakers was, "Was the dosimetry done correctly?" Or, in the words of another committee member, "Was the dosimetry a house of cards?"

MR. KOPECKY: I guess I wouldn't agree with the description of the dosimetry as a house of cards. It certainly has significant uncertainties associated with it, and that was actually built into the dosimetry system.

DR. FISHER: Are the results of your study consistent with the published body of scientific literature on the response of the thyroid to ionizing radiation?

MR. DAVIS: That is a very difficult question to answer succinctly in a sentence or two, because of the difficulty in comparing results from the few studies that would arguably be the most comparable, because of the differences in the exposure scenario. So without -- I'll get into that if you want to. But without getting into that for the moment, let me just say that these results are certainly not inconsistent with that body of literature.

DR. FISHER: So they're not inconsistent, but are they consistent with the body of literature on the radiation response of the thyroid?

MR. DAVIS: Well, I guess we do need to get into it a bit. There is nothing in the literature that is truly comparable to this set of results. Now, the factor that makes this exposure situation primarily unique is the fact that almost all of the dose -- and we're talking about atmospheric releases now -- and dose from the atmospheric releases was due to I-131. Other populations that immediately come to mind in trying to make this comparison of results would be persons in Utah exposed to the Nevada Test Site fallout, people in the Marshall Islands exposed to testing fallout, Chernobyl exposed people. Each one of those situations involves perhaps important differences in the mix of radiation types, radionuclides involved, and dose rate. And so -- and dose level. So when you think about all three, the level of dose in this study, the protracted exposure over time, and the almost entirely 131 component of the dose makes it truly unique and difficult to compare to the others.

DR. FISHER: And you're familiar with the several thousands of young children who received diagnostic iodine-131, for which doses can be assessed, and follow-up studies that have been published on those populations?

MR. DAVIS: Yes.

DR. FISHER: Okay. And what were the conclusions of those studies?

MR. DAVIS: For the diagnostic studies, typically exposures of 50 to a 100 rad or thereabouts, there is no clear evidence that those exposures result in the development of thyroid cancer.

DR. FISHER: Okay. Thank you. And I've also read those studies, as well. Did you have a technical advisory committee that reviewed your method's design?

MR. DAVIS: We've had, from the very beginning of the study, a Federally Appointed Advisory Committee that has membership from scientists, as well as the public. The scientific disciplines represented have always been dosimetry, epidemiology, and endocrinology.

DR. FISHER: The statement was made in February that this study deals with a collection of flaws. Is your study flawed in any way, or do you stand on the results, and would you stake your reputation on the results of your study?

MR. DAVIS: The study team certainly stands behind the results. I would again remind people that these are draft results. And I remind people of what I said at the beginning of the hour, that the final report will appropriately make revisions as called for throughout -- as a result of the review process. But with that caveat, we certainly stand by the results that we have reported to date, and we'll stand behind the results that we finally report out. Now, is this a question -- and I would stake my reputation on that. Is this a collection of flaws? Any epidemiologic study has limitations. This is not bench science where you can control things to a fine degree. Studying populations and studying situations that are 50-plus years old have uncertainty associated with it, and there are limitations to any epidemiologic study. I don't consider that to be fatally flawed in any way, but one needs to appreciate the limitations.

DR. FISHER: Is there sufficient statistical power in this study to validate the conclusion that there was no evidence of a statistically significant increase in these four types of thyroid disease with increased dose? In other words, that there was no evidence of a dose response relationship in the range of doses studied. Is there statistical power to validate that result?

MR. KOPECKY: Yes.

MS. STEMBRIDGE: Darrell, excuse me. I need to interrupt you for just a moment. This is the time on our agenda when we were going to take public comment, and I wanted to provide an opportunity. If there is a member of the public here who'd like to offer comment at this time, I'd like to invite you to the floor microphone. You are welcome to identify yourself for the record or not identify yourself, as you so choose.

DR. FISHER: I'm almost finished, if there are no other public comments.

MS. STEMBRIDGE: All right. Seeing none, we'll go on. We have about another 15 minutes for this agenda item. I'll check back for public comment right before we break for lunch. Thank you.

DR. FISHER: Are you confident in the HEDR data and models?

MR. KOPECKY: Recognizing that they have uncertainties built in to them, that there are uncertainties in the process of dose estimation, yes. I think they are adequate for the purposes of the thyroid disease study.

DR. FISHER: Is there any better dosimetry model available anywhere for this purpose?

MR. KOPECKY: There are revisions being made, and possibly further revisions that'll happen of the HEDR model, so there may be before, you know, our final report.

DR. FISHER: I'm talking about external -- there's a number of other dosimetry pathway codes, other models. Any better than this for this purpose?

MR. KOPECKY: Of those types of models, I'm not aware of any that are better.

DR. FISHER: Is the air pathway model in HEDR valid? And then I have one more final question to follow up.

MR. KOPECKY: I think it's sufficiently valid for the purposes of the Hanford Thyroid Disease Study. Validity sounds like 100 percent yes or no, and --

DR. FISHER: Finally, does this study provide any substantial evidence that historical releases of Iodine-131 or of any other radionuclide in any way inflicted any harm or any individual or population of individuals?

MR. DAVIS: The reason I'm hesitating in answering that question is there were a number of "anys" in that statement. I think it's important to focus on what the study says. We did not evaluate all -- we did not evaluate exposure or dose from all radionuclides released from the plant. We focused on the dose from I-131, between the years of '44 and '57, released to the atmosphere. I think that's important. One of the dangers of epidemiology is to overgeneralize from what you have done, so it's important to keep that in mind. We looked at thyroid diseases, all types of thyroid diseases, as well as some nondisease thyroid-related outcomes. We did not look at all disease. We did not look at any kind of health effect, any kind of adverse effect. We looked at thyroid diseases. So within the context of dose and exposure that we evaluated, and the diseases that we studied, this study provided no evidence that there was a relationship between the two.

DR. FISHER: Thank you.

MS. STEMBRIDGE: Elke, I had your name down as next. Has your card just dropped over from exhaustion? All right. We'll move on to Marlene.

MS. NESARY: Yes, Marlene Nesary here. I'd just like to make a plea for a couple of different ways of looking at this. I mean, I got this giant thing and I went through it, and I kept looking for one table that would show me raw incidence numbers for all kinds of thyroid diseases in one place. In the summary section, the executive summary, there's lists of different diseases broken out, but I want to see it all on one page. And that implies, I think, that I would also like to see a control group that that's compared to. I mean, I know we're going around and around about doses and dosimetry and what are the uncertainty factors, but I'd like to see raw incidence and a control group that's not, you know, Ferry County or a low dose estimate or whatever, because there's too much uncertainty in that. I just want to see Nebraska, or whatever the heck, so that I can get some sense of the raw incidence compared.

MR. DAVIS: We appreciate that and, believe me, we have heard that loud and clearly now since the report was released, and are planning to pay much more careful attention to providing not only that kind of information from the study cohort, but the best possible comparison information we can assemble from the literature.

MS. NESARY: Thank you.

MS. STEMBRIDGE: Okay. Herman, you have not yet asked a question, so I'll take you and then we'll go back around the cards.

DR. CEMBER: From a public policy point of view, what was the purpose of this study? I mean, from our point of view, we would like to see whether so-and-so was adversely affected or not, but I'm thinking of people in Washington who are setting public health policy. What would the results of this study, what kind of -- how would that affect the people who make public health policy?

MS. STEMBRIDGE: And you're asking that question of the subcommittee or --

DR. CEMBER: I guess of you, or the -- I'm convinced, by the way, that this was a well done study, and it was -- what we called fallacies before, or flaws, are really differences of opinion, and how we analyze statistics is, of course, a matter of opinion. But after all is said and done, and no matter what the results come out, what finally happens with these results? We present it to somebody in Atlanta or Washington, and then what happens after that?

MS. STEMBRIDGE: Well, that, as they say, is the \$64,000 question. I don't have an answer for that. You know, I suspect that there is going to be -- that we are looking at at least twelve months of continued discussion and comment and revision, before we get to the point that a final of this study is even going to be sent to the Government Printing Office. And what happens then -- taking off my hat as chair -- I don't think public policy is made in Washington, D.C. Public policy gets made at home. And what happens with this study, and what other public health activities should or should not be done, will be in a response to what citizens believe should happen. And they will have to lean on their elected representatives to make that transpire.

And how that's going to unfold is anybody's guess, and I've got to tell you, I don't have a crystal ball that's anywhere near good enough for that. I would like to think that this subcommittee and other subcommittees will be part of helping the federal health agencies wrestle through this, but this is very much uncharted territory, and I think we're all just taking it one step at a time. It's not much of an answer, but it's certainly all the one I've got. All right. We have five minutes left, so I'm going to go back around the list that I have been compiling. Louise?

DR. KAPLAN: I want to go back to the question that Judy asked, and Marlene's, because one of the things that stood out -- and I think this is what you were referring to. But one of the comments that has been made by a lot of people is that there was -- the way the data was reported, it looks as if there's a very high incidence of thyroid disease because, if you take each of the categories you reported, it adds up to 1,183 cases; however, I suspect that there are some people who had more than one diagnosis. And I didn't -- and is that the table? I'm not sure if that's what you were asking about. But that will be something that you will do? You will give us a table that says, this many people -- it may only have been 600 people, as opposed to 1,183. So we will somehow see that? Okay. That's great.

The other thing in conjunction with that is, if I heard Dr. Schneider correctly, his comment to me at the NES meeting was that he would not categorize everybody who was diagnosed with autoimmune thyroiditis as actually having thyroid disease, that some people can have autoimmune

antibodies present, but they don't actually have disease. And I'm curious how you categorize those people in that group. Are they all people who you would say had actual thyroid disease? Because that was a large group of 648 people.

MR. KOPECKY: I'm not sure we're the best people to answer this. Unfortunately, Tom Hamilton, who was the endocrinologist lead investigator on the study, couldn't be here today, for personal reasons. He would be much more knowledgeable, I think, certainly than me, and perhaps Scott, about the specifics of the diagnosis. It was -- the diagnosis of autoimmune thyroid disease did depend very heavily on the anti-thyroid antibody tests, which are -- and, as you may know, as improved tests came along over the years of the study, more sensitive tests came along over the years of the study, we adopted the use of those tests, as well. So we were using an extremely sensitive screen for autoimmune disease, and it may be that Dr. Schneider was of the opinion that perhaps it was too sensitive to really say that that's clearly disease.

DR. KAPLAN: And then the last thing I wanted to touch on was the comment you just made, Scott, about the literature of comparison groups -- because that's what I think Judy was getting at originally -- which is that, on the phone briefing that we had with you folks, Tom Hamilton made the statement that there are studies in which, if you just do screening, you end up with sometimes threefold incidence of thyroid disease, compared to a population that wasn't screened. And yet, in a conversation I had with Glyn Caldwell, he said that he didn't think it was that high, he thought it was much lower. So will this then also be available to us, studies which demonstrate that high incidence in screening?

MR. DAVIS: Yes. That's exactly the type of thing we are going to try to improve upon in this final version. As you know, the literature is not terribly helpful. And we made considerable effort, in drafting the first draft, to pull the most comparable reports to try and put boundaries around what might be, quote, expected. But I think, clearly, because of the comments we've received and the confusion that has occurred, we need to basically pull everything we can possibly find out and try to lay it out in an understandable way, so people can look and evaluate for themselves what has been found in other populations using different methods for looking at disease.

DR. KAPLAN: Thank you.

MS. STEMBRIDGE: Folks, I know there's still some questions to be asked, but I want to get us back on schedule, if I can. I'm hoping, Scott and Ken, that your schedule will allow you to at least stay through lunch, and perhaps the thyroid luncheon table. For those of you who still have your further questions, you can all grab a bite to eat and thrash the rest of this through. I don't know what your travel arrangements are.

MR. DAVIS: We thank you very much for that invitation. We would be happy to stay and answer any other questions here, but I think we need to move on after people have had their questions answered.

MS. STEMBRIDGE: All right. Then what I'd like to do is check one last time and see if there are any members of the public who would like to offer comments. If there are not, I think we will

stand in adjournment for lunch. We need to reconvene at 1:30 promptly. For those of you who had a few final questions, please stay here, and the rest of us will run in and get lunch tables.

(Lunch break.)

MS. STEMBRIDGE: At this time I'd like to introduce Jo Marie Tessman, who would -- I ran out of all my filler material, Jo, so you're just going to have to do this -- who will introduce our afternoon speaker.

MS. TESSMAN: Good afternoon, everybody. We have, making a presentation to us this afternoon, Mr. Stuart Harris. We are fellow coworkers, partners in crime, in the Special Sciences and Resources Program in the Department of Natural Resources for the Confederated Tribes. We deal specifically with the Hanford Nuclear Reservation. Stuart, what all do you want me say about you? Except that he's wonderful and all of this sort of stuff. Stuart has a very good presentation for you folks. Any of you that are familiar with risk assessment will see that this is a very different angle, one that takes in account our subsistence lifestyles and many of the issues that we deal with on a daily basis that many of you may not even be aware of.

So, with that, I'll just turn it over to Stuart and let him do his thing, and questions when he's finished.

MR. HARRIS: I'm here today to talk to you about some work I've done. I work on CERCLA issues, and I work on risk assessment. I'm a risk assessor and a scientist for the tribe. My title is Natural Cultural Resources Coordinator, and I work for the Special Sciences and Resources Program. Welcome to our land. I'm going to discuss how risk assessment -- if you can't see the size, you'd better tell me. I'm going to discuss how risk assessment and risk management can be modified and used with the overriding goal of attempting to maximize protection of our peoples, our rights, culture, and resources, by using existing tools. I hope you don't mind I'm reading this, because I don't have this memorized, so please bear with me. Can everybody hear me? Hello, can you hear me?

MS. TESSMAN: No, we're all asleep.

MR. HARRIS: Okay. There will be a test after this is done, so pay attention. I hope you had a good lunch. Did everybody eat here? It's a good restaurant. I just got done explaining, Louise, that there's going to be an exam after we're done here.

DR. KAPLAN: I usually write them, I don't usually have to take them.

MR. HARRIS: The first slide was the most important slide of the whole thing. Okay. Let me put this one back up here so we can talk about this one. This is a cartoon that depicts in the center a typical chain of events for evaluating risk. You start with hazard identification, determine the fate in transport, evaluate the human exposure, determine the toxicity, and finally characterize the risk. What we've done is recognize that there are two distinct paths towards determining the risk that are inseparable, due to the fact that you cannot, no matter how hard you try, separate man from the environment and the resulting consequences. Man is a part of the environment. Okay? And so, just

by doing the center path, it's not enough, especially in the context of dealing with people who are subsistence people.

Now, this slide, I always get a kick out of putting this slide up, because I've presented this risk assessment model to children, to teenagers, and adults and the Presidential and Congressional Commission on Risk Assessment and Risk Management, and this slide here is a slide on perspectives. The recognition that there really is a cultural risk stems from the process of evaluating risk. A typical risk assessment is done outside of my culture by people who usually do not have a clue about how close our people are tied to the environment through time. It's important: Through time. An evaluation done from within my culture would carry the necessary components from the beginning, so that the characterization would be more realistic.

And so on the top here you can see that -- you know, as a risk assessor, I do this too -- I sit and I work with very big spreadsheets, calculate exposures. And typically this is done for humans, the ecology, and cultural stuff is usually like phones and stuff. But from within my culture, when I'm looking at impacts from the outside impinging upon my culture, you have to look at things a little bit differently. Okay. Recognize, of course, that I work within, you know, the Hanford site a lot. All right? And, you know, we have found by working with a bunch of -- what's wrong?

AUDIENCE MEMBER: I want to know why that overhead machine is making it so distorted. We can read it, it's just --

MR. HARRIS: Why is it all goofy like that? I have no idea. When I saw this, you know, I was thinking I must be doing something wrong or something. Okay. Recognize that risk assessment is inadequate. I have coauthored a paper that was submitted to Congress called the ^ Scoping Report. And within the report we listed a whole bunch of deficiencies typical risk assessments carried. You know, lack of breadth and depth, lack of being able to address intergenerational transfer of pollution impacts, you know, lots of stuff. Okay?

Using the Native American subsistence scenario partially satisfies the environmental -- or the Executive Order 1289(A). We've used this in an extensive study called the Columbia River Comprehensive Impact Assessment, and it has been field tested within the Tank Waste Remediation System and Environmental Impact Statement, and it was published in Risk Analysis. I need to update this slide, obviously. Okay.

The Executive Order 1289(A), which is the Presidential Order on Environmental Justice, says that every federal agency shall make achieving environmental justice a part of its mission to collect demographic data where the facility has a substantial environmental health or economic effect on the surrounding populations; identify differential patterns of consumption; collect, maintain and analyze data, and the subsistence consumption is specified in that section; evaluate economic and social implications of programs, policies and activities; compare environmental and health risks borne by populations; determine whether there are disproportionate health or environmental effects. I've got to fix that slide, too.

So what happens if you take risk assessment and you combine it with environmental justice? This is something I have thought about a little bit. You learn what multigenerational risk commitments

are. You learn about what habitat-based subsistence scenarios are, and you have the opportunity to develop natural and cultural resource impact assessments, and a more truer evaluation of your individual and community quality of life.

So under the CERCLA process we must recognize that the cleanup standards must be based on all of the risks. The cost benefits selection of the technical alternatives must include all of the risks, and there must be a distinction between allowable risk, acceptable risk and affordable risk. And the people who are going to be impacted by the results must be part of the solution up front, otherwise they're just weighting factors. That's unacceptable to our tribe. I speak for all Umatillas when I say that. No, I'm just kidding. I'm not a policy guy, but I thought I'd throw that in --

MS. TESSMAN: You're on record now, Stuart.

MR. HARRIS: -- because typically the people that speak for our tribes are the elected officials, and they tell me I can only speak for my family, which is true. When you're dealing with Indian populations specifically, as when you're dealing with sovereign governments, you have to deal through the government process. Simply talking to a technician or a staffer is not the same. So if we do those things such as determining, you know, the technical solutions based upon the recommendations by the people that are being impacted, then the road towards a better future can give us more complete alternative solutions that will be more acceptable in the long run.

And when you're doing an EIS or something like that, you won't get bogged down at the back end, responding to questions you can't answer, or simply say that you've accepted that they've made a comment. That's one of the worst things that you can do, is when somebody has a valid complaint about the way that you've done something, and you simply just say you did it and that's the way it is. I mean, that's not working with the people towards a better solution. Okay.

I mentioned cultural risk in the very beginning, and I'm here to tell you that it is a reality. And, you know, if you take a look at these two boxes here, we initially started it on this left side here. I want to show you a slide here right now about what happens if you sidetrack cultural risk into outrage reduction or public participation. The process of making sound decisions must take into account cultural risk in the decision context. Cultural risk is not a perception, it's not an opinion, it's not preferences, it's not considerations. It definitely is not a weighting factor. Okay?

Currently equity and environmental justice are treated as weighting factors in many major decisions that involve millions of dollars. Cultures are at real risk and can be marginalized into extinction if the impacts aren't rigorously evaluated and used as decision criteria. So, once again, I'm showing you here, here's a typical exposure assessment model. Here's a source, here's a release, here's a pathway, and then finally there is an uptake by a human being. The little children that I give this presentation to call this slide the shopping basket slide. Why is that? Well, a lot of the food that people get obviously comes from the store. A lot of the food that I eat doesn't come from the store. A lot of the food that many Indian people eat doesn't come from the store. They go out and collect it out in the environment, and they spend a lot of time and effort doing that. I work with a lot of spreadsheets and I calculate a lot of exposures.

When you look at my culture and all the components that make up a continuously sustainable environmental management science that has been developed over 10,000 years in this area, putting some components in a spreadsheet based on an outsider's perspective of what is important doesn't even come close to achieving the needed result. If you would consider this cartoon, that this is some person here, and these are attributes of their culture -- you know, kind of a one-dimensional thing; and then you break them into linkages, which is typically done; and then you take these linkages, because they've identified that they're important things -- they can say there's salmon out there or something -- and then you put these into trophic levels -- you know, primary, secondary, tertiary -- then you can calculate exposure. But if you calculate exposure, is that the same thing as calculating cultural risk? Nod your heads or shake your heads. No. I like it, people are just standing there. I told you there was going to be a test, there's going to be a test when we're done here, and this slide is the key slide.

So you can't do it from a spreadsheet. And why? Because our people are inextricably intertwined with the resources of the environment. There are multiple pathways and multiple exposures that we get from just being who we are. We have unique multiple uses for food; cultural, ceremonial and religious practices. You can't take one and say we'll separate that out, and then that'll be one component or a -- you know, one element of the risk calculation. You have to look at the whole thing, kind of like a gestalt perspective. Okay. A more suitable assessment -- I mean, this isn't even close to being like a real good one -- but a more suitable one would include things. See, it would include, on even a simple species such as a cattail, it would include much more. Okay? Recognize that the amount of interest in our people's culture hasn't been enough to warrant the depth needed to determine all the factors related to even a single species, let alone plants, animals and sites we use. I mean, how many different ways do we use cattail?

There's quite a few ways, and this is just one species. We don't have uptake data for a lot of the plants. We don't have any of the absorption data on the tissues of a lot of the plants and animals we use. It just isn't there because, you know, people haven't taken the time or the money to try to find that out. And if they did, they would have to come to us and ask us how we want to design our own studies to do this, because any data that we gather about our culture is ours.

So in developing the Native American subsistence scenario, you know what I do? First of all I received approval from our governing board of trustees. I demonstrated my accountability within the community. I established rules for protecting confidential information, and I conducted many, many, many traditional style interviews, and received additional teachings, in addition to what I've learned, and a lot more information about who I am and about my culture. It was long and sometimes it was tedious, but the end result, you know, I guess it was -- it was hard to try to -- I guess, just by not doing it, you know? I mean, when you're talking about your people being exposed by pollution, the pollution impacts and stuff, and then you've got to go through the community and talk to people who are very hardened about talking to outsiders, and very hardened about talking to you, you know, because numerous anthropologists just swarmed through our reservations and, you know, people are kind of sore about that.

So when I came on the scene, you know, they were kind of like, you know, thinking, "Well, Jeez, why should I talk to you?" So we had to go through this process, and it wasn't easy and it took a long time. So I began with the suburban CERCLA scenarios. Okay. I had to obviously take a look

at what EPA had done. I modified them to reflect higher environmental contact, Native diets; determined what the reasonable maximum exposure was; checked the dietary caloric content and other factors; and estimated the approximate percentiles and ranges. One of the things that we had to realize, right off the beginning, up front, was that you don't need plant-specific or species-specific information up front, because our computer models that we use right now aren't that good. Down the road our computer models will be better, but still you have to collect the data on, like, soil to root uptake, or absorption across, you know, the membranes of animal lungs and stuff like that. Okay?

We modified the dietary intakes for game, fish and plants. We developed a sweat lodge pathway. Around here we use sweat lodges. There are many Indian tribes that do that. And if your water has got contaminants in it, you have dermal absorption, you have inhalation, and you have a very high temperature. Typically the suburban 30-year exposure to radiation was modified to 70 because -- good afternoon -- because our people who live here are home. They can't move anywhere else. They're home. Okay? And so we don't move every three to five years to go somewhere else to try to find a new home. We try to move back to the reservation because this is our home. All right.

We also had to make exposure frequency reflective of living up here on the plateau, and then we have a multihabitat focus. And then we divided it out for specific activities, such as hunting and fishing. When I started, I explained there was going to be an exam at the end of this. Well, good thing it's a multiple-choice test, right? Okay. What I've found was that we have 2 to 200 times more exposure with a subsistence lifestyle versus a suburban lifestyle. That's a lot. The average subsistence lifestyle is equivalent to at least the 90th percentile of the average suburban exposure. Initial sensitivity analysis showed that the difference between the means of the two types of lifestyles range from two to a hundredfold. The magnitude of the difference is due to the fact that the traditional way of life, as it is currently practiced, is more than just a suburban lifestyle with extra fish consumption added on. I got to review this EIS called the East Side EIS, and they had a really cute little paragraph in there. What is cultural risk? Okay. If you read this, you know, it says about kind of what a culture is and stuff. And one of the things that we modified it to say is that it includes time from the very beginning. It didn't say that. Time was not part of culture. All right? So look around you and try to identify the American culture. I think you'll be surprised.

What is cultural risk? Well, because our people, the [^] Chatoken, have been genetically modified by the ecology for thousands and thousands of years, and have had their behavior modified as a result of responding to the flux of the ecology of our land for thousands and thousands of years, and have produced a viable holistic environmental management science designed for continuously sustainable enhancement of our culture, and because the fabric of our very existence, including our sounds, medicine, science, art, music and lifestyle, is a reflection of thousands upon thousands of years of site-specific environmental shaping, any impact to those resources, of which we are a part of, is a risk to our culture. I do have a copy of that up here.

The subsistence scenario that I've developed is part of a larger thing that we're working on. I'm specifically working on developing a better computer model, a better way to evaluate risk across media. We're trying to develop habitat specific models, such as riparian versus woodland versus upland. We need more guidance from our tribal elders, and that's one thing that is -- you know, the tribes around here have, I guess, been mixed through marriages and stuff, and have enriched each

of the other tribes with their own culture. We're going to continue to develop guidance and continue to seek other ways to gain entry into the system, to modify and improve risk assessment. Recognize that the Native American subsistence scenario won't answer the question of how contaminants move through the ecosystem, or other stressors that affect it. Recognize also that this exposure, our exposure can be underestimated because we haven't evaluated key ecosystem components. We have to go out and do biological resource surveys to do that, and that's something that costs a lot of money.

Linkages between key components aren't typically included in models. We have to try to develop computer models to account for that. And the full range of traditional activities, even just for this tribe, they're unique and they haven't been evaluated to the fullest extent they can be. Additionally, the current models, they don't take into account the myriad ways people interact with their environment, and how they're interdependent with the environment through time. And the last bullet there says that no model will ever be able to do this but, if you have the right cultural expertise and background, you might be able to get the information that might help you. Okay.

This slide here is kind of to tell you really what cultural risk is not. Remember the cloud, the one with the cloud on it? Well, this is kind of one that just kind of lays it out like that. Real risk is not anything generated by computer. Okay. In summary, the approach that I've developed, along with a bunch of really smart other people, should provide practical solutions that, given the existing decision framework, should maximize protection of the tribe and maximize tribal benefits, in the context of doing cleanup works. Okay? In the context of planning for something to happen, it works. In the context of, you know, designing infrastructure development, it works, because you take into account -- up front -- the cultural way of life and the people's values. And values are a good thing. Everybody has them, and everybody has a culture, too. Okay.

And additionally, I wanted to say that there are some data gaps that we need to recognize, such as species specificity, uptake dose, response data, additional animal organ ingestion and plant parts within our people, and then corisk factors such as multiple exposures, access to health care, underlying health problems, nutritional differences within the community, the effects of the substitute diet -- and by "substitute" I mean non-Native diet -- and genetic defects in small, closed gene pools; health effects in addition to cancer. We have to recognize that there are sensitive subpopulations out there such as children, elders, women of childbearing age.

One way that we've addressed this is to supply a safety factor, such as taking a reference dose and dividing it by ten or something like that. We have to recognize that mother's milk passes a lot of pesticide stuff. There is gender stratification. There is complete community exposures, too, especially within tribal communities, because of extensive families and trade networks. And then there are cumulative multigenerational effects that we have to take into account. And when we think about all of this, I think about some of the things that I need.

You know, down the road I'm going to be trying to do things like try to find internships to bring along young scientists, so that they can work on this; try to find training opportunities for energetic people who want to work along this line; more cooperative agreements with government agencies, because eventually other tribes and other communities -- because this is actually a community-based model. If you can develop a model like this for community specific exposures

and stuff, and that these people's values and their data is incorporated up front, you'll have a better decision-making context, and you'll save money.

I think that's about it .Are there any questions?

MS. STEMBRIDGE: Trisha, can you use the microphone?

MS. PRITIKIN: I'd like to know whether this system you've described can be applied to a typical individual from, say, the Umatilla tribe, who might be a person who was exposed as a young child to Hanford's emissions. And can this system be used to impact the estimated doses for that tribal member? Because I would imagine their doses would be significantly different than my doses, as a person exposed in the Tri-Cities area during those years. So I want to know if this system can be applied really concretely to helping to estimate a tribal member's radioiodine doses.

MR. HARRIS: Sure.

MS. PRITIKIN: Have you done that yet on some case studies or some individuals, just to see what --

MR. HARRIS: No. I haven't had time or money to do that.

MS. PRITIKIN: And is this system being used by more than one tribal nation, or is this a Umatilla system?

MR. HARRIS: Yes, it's being used by other Indian tribes. The Oneida of Wisconsin have taken this and they are working on developing their own subsistence scenario. The St. Regis Mohawks are taking a look at it, and they're going to probably use it for PCBs. The Spokane Tribe has contacted me recently about taking a look at it for their -- the Yakama, of course, have been -- I've coauthored a paper with a Yakama employee. They definitely, you know, might be considering it, but I don't know. But the Nez Perce have developed some work off of this, yeah. Pribilof Island Group has contacted me about it. There are quite a few tribes that have contacted me about this, because of the fact that pollution impacts affect a lot of Indian tribes and poor people first.

MS. STEMBRIDGE: Stuart, in your article in the Risk Analysis, you've given a lot of good parameters for rates of ingestion and inhalation and so forth, for the Columbia River tribal areas, is the way I've interpreted what you've reported here. Do you know of similar risk models that have been developed for other Native American communities, or are you in communication and developing them with other communities?

MR. HARRIS: This is the first of its kind in the nation, and I am the contact, and I am working with other Indian tribes and nations on showing them the steps on how to develop their own. I can't do it for them; they've got to do it themselves.

MS. MOSES: Stuart, I'm with the Colville Tribe, and I'd be interested in getting a copy of your

transparencies there, and also willing to -- I'd be interested in looking at your model, so that I could maybe take something back to our reservation and talk to our natural resource people regarding your model and how we might use it within various offices within our tribe.

And also, another question I had was, you mentioned something about cross generational effects. Can you discuss that a little more?

MR. HARRIS: Okay. First of all, I'd be glad to share this freely with you. I'll give Jo Marie Tessman copies of the slides and copies of the paper. And even, I guess, I'll give you a copy of the speech I was reading off of here. And I can give you one example, real quick here, about multigenerational cultural impacts. All right. There is a place down on the Columbia River here called The Wedding Party. Have you heard of that?

Well, anyway, along the Columbia River there is this group of rocks, and the group of rocks is called The Wedding Party. And the way that these rocks are arranged, it kind of looks like it. But there's some stories that are attached to that, Coyote stories for teaching children that are attached to that. And we call them oral histories, of course, and they're typically taught by elders to children. And if that particular place were to be impacted by pollution or something like that, and you couldn't go there to relay those stories -- okay -- the loss of the transfer of intergenerational knowledge between the elder and the child is a cultural impact. The actual pollution impact to that site would be a cultural risk. Okay?

Because, see, the science, the traditional environmental management science that was developed by our people wasn't, I guess, transformed onto paper because, see, reading and writing and money, that's an Indo-European cultural attribute. Within our tribe here, within our tribes here, that same kind of knowledge transferred into our oral histories. And so if you cut that, you know, you risk losing chunks of how teaching is done in your culture. So that's why it's so important, for me at least, to address pollution impacts on elders and children, breast-feeding women, because, you know, all these things are related. They're all related, and everybody has something to learn, and everybody has something to be taught or to teach. Does that makes sense?

MS. MOSES: Yes. I guess I was thinking of the transfer of some type of effect, a disease or whatever.

MR. HARRIS: Oh. That was a reference to the pesticide study I read in Science Magazine a couple of months ago, how they had been measuring pesticides in migrant women's breast milk and transferring it to babies.

MS. MOSES: I know that was a concern I had with the -- I should have raised it earlier, but, I mean, about the Hanford Thyroid Disease Study, because there is a lot of what they call migrant workers that were Indians, from at least our reservation. I know my grandparents went down there and did a lot of things, you know, touching the land, picking the hops, eating the fish, drying it, drinking breast milk -- all of these things which haven't really been factored into that study, I mean, which really haven't been considered when you're talking about Native American populations, with respect to any kind of study related to Hanford.

It's real difficult, I find, making that linkage so that people understand that, you know, when you gather data among certain populations, you can't use the standard uniform way of gathering data that you would in a city or in a suburban area or in a non-Indian community. It's just different. And that difference is what I find a real problem to overcome sometimes, when you're trying to explain that you have a health concern because of this, but it's only because of the difference that people choose not to think that you have a health concern. That's what I was kind of, you know, looking at in your presentation when you were talking about cross generational, you know, effects.

MS. STEMBRIDGE: Del.

DR. BARTH: I would like to compliment Stuart on a very excellent presentation. I think the approach that you have suggested there should be seriously considered by the Intertribal Council as a mechanism for doing risk assessment for the tribes. I think there's something there for everyone. And if the individual tribes need to make minor modifications, I think the basic structure that you have presented there is very good.

MR. HARRIS: I appreciate that. Once again, it's free for your use. I didn't do it for myself.

MS. STEMBRIDGE: Judy, I think your card was up next.

MS. JURJI: That was a very excellent presentation, and I think I learned a lot. One question I had, going beyond risk assessment to actual kinds of studies that might be done, I had a brief chat with Moses during one of the breaks, and he was pointing out that the tribal groups are usually too small to do traditional epidemiology, because the numbers aren't big enough to have that statistical power. And I'm just wondering what kind of studies, or whether you've thought more about what kinds of studies could answer some of the health questions, besides those traditional epidemiological ones.

MR. HARRIS: Well, one of the studies I've been thinking about quite a bit is determining what the baseline bioconcentration for key tribal species is. That would probably be one of the first steps, because it's something that we need really bad. Impacts from all sorts of traditions are already there, and because we have such a wide range across many watersheds, that would probably be one of the first things I would do. I would probably look more into developing children and elders scenarios more carefully. You know, I'm not a statistician, and I do realize that, you know, the epidemiological studies are massive tools to move around and stuff. There are tests for small communities that I've heard about. I'm not aware of how they work. They would be good to probably try to research that. I think that's kind of where I would start. I'm aware of the problem, but I don't know how to solve it. Okay?

MS. STEMBRIDGE: I have Moses, and then Jude.

MR. SQUEOCHS: Thank you. Moses Squeochs with the Yakama Nation. On behalf of indigenous people, not just here in the Northwest but throughout the world, the question about statistical power, that's relevant to conventional knowledge, conventional institutional knowledge,

not only here in the Americas, but wherever institutions of higher education exist. So statistical power is a proprietary thing with that particular institution. The only unfortunate part about it, that I see, is that it fails to reach down and take into account certain populations below a certain quantitative level, unfortunately for us who have kind of found ourselves in that category.

So the work that Stuart has undertaken, I believe that he has received an assignment, and he has seen his way to find, within his path, during his short time here on earth, that this is his assignment to undertake. And it's on behalf of not only his people, but other indigenous people or other what they call subcultures or subpopulations. There are other subcultures and subpopulations that do not have statistical power within the conventional methodology of what they call risk assessment.

The institutions of higher education -- I just returned, it must have been about a month now, maybe five weeks now, from meeting with a faculty at a university that has no -- no reluctance whatsoever to let people know that they're ranked internationally. This university is ranked internationally very close to the top institution in the world for the students that they produce. So, in hearing this, I had a question. I asked this question of this faculty, in reading their catalog, reflecting what they had available as a knowledge, and what they were attempting to teach the students, or what they were successfully teaching the students from their institution. That's all fine and well.

They had introduction to risk assessment, and I asked them if they could explain what they were teaching. They gave me a general response, yes, this is what we're doing, ecological and health assessment, these things such as this. And this word came up again, this word that's been just kind of resounding in my head. I heard a team of doctors that was brought to Seattle by the Centers for Disease Control and Prevention here a few years ago. I believe that's where I encountered Stuart when he was kind of getting started on his work. But this word is "uncertainty." And right behind it, almost in the same breath, another word is used: "assumption."

So in my inquiry to the faculty -- and that's my question to Stuart -- is what part of this curriculum, this course curriculum, relates to those interests who fall below that line of statistical power? I just returned from Albuquerque, New Mexico, from a National Research Conference that is held every year. Let's see, it was the 11th Annual Research Conference the Indian Health Service was holding. I was looking for answers along the lines of what Stuart presented here today. What is going on in research, with regard to that specifically, is designed for federally recognized tribes, because that's the only parties who the IHS deals with.

But back to the faculty: That is my question, that was my question. What part of your course curriculum relates to those individuals who fall below that statistical power qualification, so you can get factored into the risk assessment factoring and formula? I didn't get an answer at the time. I didn't expect one. But I asked them to think about this, this faculty. There was at least nine, at least five department heads that I was speaking to and asking this question. I said, I'm interested to know, because many of the professionals that you have produced have come out into the ancestral homeland of my people, and they have seriously degraded, seriously polluted this ancestral homeland. And it does have serious, extremely serious implications for adverse health effects.

So, just to cut short here, I'd like to get back to Stuart and ask him, in giving your presentation, I'm sensing that your presentations are also shared with educational institutions, hopefully not just at the primary and secondary level, intermediate and secondary level, but I'm hoping that eventually you'll be able to speak to universities, as well, even above the undergraduate and the graduate levels. I'm wondering, are you beginning to get a sense, I guess, of attention? Are they beginning to recognize you, or are they beginning to say, yes, that is something we haven't looked at yet, we feel like maybe we would like to work it into our course curriculum, so that the nation of professionals that we encounter will have this knowledge before they come out and assume positions, say for instance with the United States Department of Energy or United States Environmental Protection Agency, or even HHS or ATSDR or CDC, things such as this. Institutionally, I recognize a very great degree of knowledge that is lacking, with regard to indigenous peoples and the interests of indigenous peoples. And this opened -- this question or comment -- you can take it as a comment or you can take it as a question -- is open to any people affiliated with the educational institution of the Americas. So that's what I'm trying to get a sense for. Is there seemingly a developing relationship between yourself and your concept that you're relating to everybody else, and the educational institutions of the Americas? Thank you.

MR. HARRIS: I've lectured to graduate classes at Cornell and the University of New Mexico and Washington State and others, and I'm working with the Department of Energy's risk excellence -- Center For Risk Excellence, on developing educational modules which we hope to transfer to the land grant colleges, you know, like Pasco and those kind of places. It's a lot of work. I've had a pretty good reception on it. The people that really -- that really needed to hear it, though, I think are, I guess, the leaders within the government agencies, and how they can, you know, work with tribes to take this and make better decisions. You know, it's one thing to go out and train young people on how to do a better risk assessment.

That's a good thing, and that's one thing we need to do. But it's also a good thing to do, to use this where they're spending money, because you know colleges typically don't have money towards cleanup and stuff, while the agencies do. The Department of the Army and the Department of Defense and Energy have taken a look at this, and so has EPA. We're looking at trying to get it addressed at the highest levels we can. One of the things that I noticed the most was the fact that I'm a rank amateur when it comes to exposure, even though that's what I do. When I started talking to elders about what their exposures were, I thought I knew what I was talking about. And maybe within some circles, yeah, I do. But when it comes to talking with elders about what their exposures are, I'm a rank amateur. It was embarrassing, but I learned a lot.

And those are the people who you need to go to, to find out, you know, the major amount of information that you need. But I'm going to keep pushing what I do, and I'm going to keep trying to tell people that there is a better way, so if you guys take a look at this and you decide you like it, you know, there's no reason why you can't modify it for your own use. That's okay with me.

MS. STEMBRIDGE: Jude.

DR. VAN BUREN: Just a comment. When I was watching your presentation, and when you showed cattails, I remembered a study I'd read a couple of years ago. Dow Chemical Company had this horrible contamination area, and they decided to plant a bunch of different plants to see which

would uptake, and the contaminant was lead. And they found that, lo and behold, cattails was one of the best species for uptaking lead to get rid of it. And then you take the cattails, burn them, and then you have a lot less lead. And I thought, isn't that interesting, that a plant and its ability has, over generations and years, has been able to uptake pollutants, and here is a species that is being used by a population, in all of its uses that could be used.

So, you know, in a way, maybe the bioremediation research has something to offer, in terms of trying to determine -- and for different ends, because there they're trying to figure out, gee, how can we get rid of this stuff, versus Native American populations that use these materials and use these species in their life. And I think that -- it's a good example, again, of different perspectives.

MR. HARRIS: The Hanford site found out -- I think it's mulberry? There is a famous case where some guy made mulberry jam and sent it to the Governor, and it was classified as low-level radioactive waste. You know, I've had mulberry jam. It's pretty good stuff. You know, I think about down in Northern California, they have a basket weavers association down there, and those people have a completely different lifestyle and a completely different exposure, pathways. And one of the things that they use a lot are willows and the willow bark, and they put them in their teeth and pull them out and stuff, and so their exposure pathway, you know, is ingestion. Boy, willows pick up a lot of stuff; mercury is one of them.

And so whenever I talk to other Indian tribes about this, you know, I can't tell them what to do, but I tell them, I say, "You know, you have to take a look at what your culture is, and break it down so that you can determine where, within that culture, that you're receiving the most amount of exposure, so you can get kind of like a rough cut." It takes a lot of work, but it's unique for every tribe. And the governments -- you know, one of the things I also caution about with these people is that this stuff is proprietary information, the cultural information. And so allowing them to recognize where their exposure is, but also letting them recognize the fact that the models don't have to accommodate species specific stuff is very helpful. And so your comment is on line with that.

MS. STEMBRIDGE: Del -- my apologies. Mr. Burke?

MR. BURKE: Thank you. First of all, I want to thank Harris for his presentation on the Native American risks scenario. And then I'd like to talk a little bit about I think what's been talked about here today, and that is that only recently -- and I think that everyone here has gotten this little packet. It's a booklet about like this, you know, and it probably weighs a pound, and it was about Y2K. Have you all gotten that, seen that? They come out of the Department of Health and Human Services. And if you haven't seen it, you want to read it, because it's very important, very important.

It has the year 2000 and how it's going to affect our computers, and there is a great deal of concern about that. And as a matter of fact, there's so much concern that the Department of Health and Human Services has put out this booklet talking about it. And yet the kind of thing that Stuart is talking about here, about the tribes and their risk scenario, this has been going on for a long time, this very same thing. But we're going to put out a whole -- we're going to put out a whole booklet about Y2K, because there's some -- there's some external effect.

There's some external effect that we need to be conscious of. And yet, and yet we are talking about, from time to time, the Columbia River water pathway, which is very important to the Indian tribes, but very little concern has been given to that, albeit that there is a great deal of external effect that's being put upon the Columbia River. And I guess that this power we were talking about awhile ago, that the Hanford Thyroid Disease Study, that has a great deal of effect on the Columbia River and, you know, the dams that are put aside for power, that were built to produce power and so on.

But I guess I'd better get on -- get back to what I was talking about to begin with, and that's the Y2K, that some external power is going to affect our computers. And this is a very good example, and people are very concerned about it. But I think that, you know, that the internal power here is what's causing us to come about. Everything else, everything else is here with the -- we do things here, and it all comes from the inside, no external. The only thing is that we have a higher power somewhere. I don't know, I've never seen that power, but I believe today that there is a God, that there is a Creator, and that external power is having some effect on the Y2K, you know.

And we're concerned about that, we don't understand what's going to happen here, although we know that there's something going to happen in 2000, that's all coming from within. People know that. But what is it going to be? And when we talk about the Columbia River, we're talking about salmon. The Indian people are talking about salmon. Salmon are very important to our culture, a part of our life is salmon. And this comes -- this comes from that power I was just talking about, that higher power. I don't know how salmon came here, but it's a part of our lives, and it's very, very important to us.

Yet people are willing to -- people are willing to extinguish salmon for cheap electricity, for cheap electricity. Who cares about salmon? You know, I've heard the irrigators say, "Well, I'm sorry, but I guess salmon will have to learn to walk if they're going to get up the river," and it's things like that. And I guess I'm really concerned about -- really concerned about how Y2K can be such an important thing that the Department of Health and Human Services puts out an entire booklet, yet nothing is said about the Indians. The thyroid disease study has come out, and nothing about the Indians in there. The Columbia River has been studied, and yet the Indians have not had too much to say about the studies that have gone on in the Columbia River. You know, and yet this is our homeland. And that's why I invited people here yesterday, and I'd like to invite you all here again, but this is my homeland.

This is my homeland, and there isn't anybody in this room, other than the Indian people that are here, that can say that. This is my homeland. You know, I've been asked by white people who said, "Well, Bill, when can I become a Native American? How long is it going to take me to become a Native American?" I don't know. I don't know. But Native Americans, this is our homeland here, and we've got to hang onto these things.

If you read the East Oregonian, which is the big paper here out of Pendleton, there was a great article about salmon yesterday, and there will be another article in there tonight. If you haven't read the East Oregonian, pick it up. There's going to be some good articles in there about salmon. And

so it's these kinds of things that I think of, which Stuart is talking about here today, that we've got to become cognizant of Indian people and what their life is all about.

I was absent this morning, because I had to go to a funeral. I went to a funeral because there's -- we are such a small group of people, and there's a lot of love, a lot of intimacy in this group of people. And I have to -- I had to be at that funeral, because that was a friend of mine, a dear friend of mine, and I had to be there. I couldn't -- I could not stay away. And it's those kinds of things that need to be understood by non-Indian people, and it's this study that Stuart is talking about here, this is -- this is one step toward that understanding. And hopefully maybe we can come up -- maybe we can come up with a booklet on how the Indians are being treated by the Department of Health and Human Services sometime next year. And I think I would advocate for that here at the Hanford Health Effects Subcommittee. Thank you.

MS. STEMBRIDGE: Are there any other comments or questions for Stuart? Del.

DR. BARTH: I would like to follow up a little bit on what Moses was talking about, and point out that many of the concepts that Stuart has presented here are equally applicable to other groups of humans: A small town in Maine, a major metropolitan area like Chicago, all of them have certain kinds of lifestyles which are different, substantially different from one another. And so those concepts are equally applicable to other human groups.

And I just taught a course this last semester at UNLV entitled Environmental Policy Analysis and Decision Making. And many of the points that he brought out I included in that course. There's a brand-new book out, 1999, by Sexton. And it's Island Press, and the title is Better Environmental Decisions. And that was the text which I used. And basically, what it argues is that the way in which the government has been protecting and controlling the environment, it has to be changed. And the way it has to be changed is to get collaborative efforts, involving government, communities, public health individuals, and business, all working together, and get away from the old command and control approach which government has been using.

And I think that is coming to pass, and we're going to see all of our environmental decisions moving in the kind of direction that Stuart has just been presenting here.

MS. STEMBRIDGE: We can only hope. Thank you, Stuart, very, very much for your presentation, and we'll look forward to getting a copy of your overheads as well.

MR. HARRIS: Appreciate that.

MS. STEMBRIDGE: All right. Before we break up into our afternoon work group sessions, I wanted to review just very quickly, in addition to the usual agenda items that each work group has before it, also at this particular meeting we're asking each group to try and find a few minutes to discuss our annual review of, are we representative and balanced enough as a subcommittee.

Is there some particular segment of the community, defined broadly, which should be at the table for the Hanford Health Effects Subcommittee, and which is not now? And I would ask that you

include the results of that discussion in your individual work group report-outs, tomorrow when you do those. In addition, there is a -- there's a second task which has to do with what seems to be -- well, we just have this national evaluation thing stuck to our shoes, and we can't seem to quite get away from it.

And I'm sorry to put that so baldly, but that's just how I feel about this. And I am operating on the premise that everyone here, if you were not a party to the conference call that was held several weeks back, that you have since been apprised of the gist of that conversation. Now, if that assumption is wrong, wave your hand and I'll give you the abridged version.

MS. CAMPBELL: Everyone was provided a summary of that conference call, either by e-mail, fax or both. It's on the committee on government liaison.

MS. STEMBRIDGE: Is that ringing a bell for you, Trisha? Well, the thumbnail sketch of this is that, somewhere in the marble halls of Atlanta, the idea was hatched that there should be some kind of evaluation undertaken, at the national level, of the health effects subcommittees. It was discussed at the meeting in Utah in December, at which time it was rather painfully obvious that what exactly it was and how exactly the agencies were proposing to get from here to where they wanted to be was very much in doubt. The other three subcommittees at that meeting in Salt Lake said, sure, we have people with lots of time who will participate in working this through.

Our subcommittee, however, said, "You know, we're not so sure we want to just gallop into this." And Buck very graciously agreed to serve sort of as our reconnaissance scout, and keep an eye on this process and see, in fact, if some of the concerns that were voiced by this group were addressed as the planning process unfolded. Buck went out, he kept scouting, and giving us periodic reports. At the last meeting Buck's recommendation was, essentially, it's not going anywhere. They're no closer to being -- to having any kind of an evaluation that speaks to some of the evaluation needs that folks on this subcommittee have voiced. And so the subcommittee adopted Buck's recommendation, and we said, "Thanks, but no thanks, you're really not going anywhere." What we'd really like to do, though -- and this was conveyed to the agencies -- is discuss how to have a Hanford specific, very tightly defined mutual evaluation process, that would involve the tribes and the subcommittee and the agencies. The upshot of it is, there's no money to do that. The game is the national evaluation or no evaluation at all for this subcommittee.

Given that change of landscape, there was a conference call convened to convey that, and the folks from the other subcommittees are having an actual face-to-face working meeting in Atlanta in a couple of weeks. They are bringing in, as I understand it, a professional evaluator/facilitator for those meeting days. And I understand that Buck is going, has agreed to go; Judy Jurji, and Rachel Moses on behalf of the subcommittee. And they are going to see if, in fact, there is some way to move this national process to some sort of definition that can be of service to us, in what we are looking for. But what these people need is some clearly defined list of bullet items.

And we're not looking for anything extensive, just the basic, this is what would need to be included in this evaluation for it to be useful and meaningful to the Hanford Health Effects Subcommittee. That is the second item we're asking the work groups to speak to and give some

thought to, and come back with a couple or three bullet items, which we will then discuss briefly and compile and send off to Atlanta with these folks. Buck, please fill in around the edges for me.

MR. CAMERON: You said I committed to go to Atlanta. I have committed to go, if this subcommittee wishes to continue to pursue the questions that are being raised at that meeting. This process has started with a method in search of a need. And the method has locked us into a process of evaluation of how the committee works. And then there's some benefit from that, both for us and for other groups. But it's very limited, and it is not what many people think this committee needs. If this committee as a whole feels that there is enough value to be gained from that, then I would certainly go and pursue that matter, but I don't want to go and create the impression that we are buying into a process that we are not buying into. So I want the advice of this committee as a whole, whether to continue in any way with this process.

MS. STEMBRIDGE: All right. Linda, I see your card. There is one thing that I wanted to say that I forgot. And that is that, by virtue of the fact that this national evaluation is going to be the evaluation, whether or not we participate in it has ramifications for us. And if we decide not to participate in that, there may be some not-so-positive spinoff from that. It was mentioned in the course of the conference call that the evaluation would be -- could be possibly used in the context of the agency reports to the Department of Energy, which directly hinges on funding. So I want us to be very careful and deliberative, whether we say yes or no, to understand the pros and cons, that we do the T-bar and tally up the pluses and minuss. But I agree with Buck. I don't think that it -- I certainly do not perceive that it's a foregone conclusion, that by us having representatives at this meeting, that we have somehow said, oh, yes, we're thrilled about this. And if I gave that impression, that was remiss. Linda?

MS. KIER: I'm glad you brought up about the possible ramifications, because I think it was -- is it Owen ^ Divine who was involved in the conference call? And when this lady that's in charge of the process of the actual evaluation process -- her name is Jamie from NCEH and associated agencies. I think he did say that this was all supposed to be part of a report to DOE, that it would be -- that it would end up along with the other -- we would end up along with the other sites, filling a certain number of column inches evaluating our process. This was stated in the conference call, correct?

MS. STEMBRIDGE: There was a direct question as to who -- what is the purpose of the evaluation, who is the evaluation for. And out of the sort of cloud of dust of all the places that it could go, DOE was one agency that was mentioned.

MS. KIER: So DOE has already stated that one of the reasons why they held up funding for medical monitoring and the subregistry was they wanted to see how our product proposals fit in with the National Research Agenda, was the phrase I believe they used in Utah. And so I'm wondering, is there in point of fact a tie-in? Will this affect? Do we have to play along in order to get the long-delayed funding for the medical monitoring and the subregistry?

To me, we need to cut to the chase on this. This woman named Jamie stated that it could be a two-way process, that we site representatives could, in fact, question how our process and product and procedures were affected by the agencies, primarily DOE funding, but also NCEH, ATSDR

and NIOSH. In other words, I'm thinking a little bit about the presentation we've just had from Stuart Harris. And the thing that he learned was, you know, it's not a one-way process. It's a two-way process if anything is to be accomplished. We received her assurances. We didn't receive Owen Devine's assurances or any of the agency assurances on that.

So I guess there's basically two questions. Do we have assurances that it's a two-way process, number one? Number two, can we get a clear understanding of whether there actually is funding hinging on this?

MS. STEMBRIDGE: I will say that I do not believe that we have any assurance at the moment that it's going to be a two-way process. They are still developing the process. And as to whether or not our funding depends upon participation in this, ultimately that goes through the Department of Energy. And I don't know if Roger Briggs is here, and if he wants to address that.

MS. KIER: And how does that tie in with the so-called National Research Agenda that we are supposed to somehow fit into? I'm quoting from our Utah meeting.

MS. STEMBRIDGE: Well, those are very good questions, Linda. My hunch is we don't have answers right here. It's part of the great unknown of this thing at the moment. Louise.

DR. KAPLAN: Having been on that conference call, and having been nothing but disappointed in the answers to questions about the purpose of this evaluation, I think that we should not feel as if we're being held hostage by this researcher and this research proposal. First of all, given where they are and how they are approaching this, I suspect it'll be about the year 3000 before it gets done. And I suspect that if we could come to some clarity of purpose, we could perhaps fulfill our mission before the evaluation, which is used to guide us in our work, is ever completed.

I don't think that we should feel obligated to do something that we don't feel is clearly defined and clearly worthwhile. I think if our funding is held hostage as a result of our not participating, that would give all the more fuel to the argument that this committee is really window dressing and not truly citizen representation and advisory to these agencies, and therefore shouldn't even be functioning, because who wants to be just window dressing? So I clearly feel very unsettled about this, and I am not supportive of continuing this.

MS. STEMBRIDGE: Steve, I know you're on the evaluation committee, or you're involved with this. Did you want to add something before I go on to the rest of these cards?

DR. AHRENHOLZ: Yeah, if I could, I'd like to just make a few comments that are from my perception, as far as being involved in this from NIOSH. And I'm not aware that there is -- from what we've been told and what I know, I'm not aware that there's funding contingencies associated with your participation, or if you choose not to participate in this health effects subcommittee working group evaluation process. That's nothing -- I have never heard anything to that extent.

Whether you choose to participate in it or not is exclusively up to the Hanford Health Effects Subcommittee. Last December when we were in Salt Lake City, there were some concerns raised when Larry Elliott, our branch chief, had made some comments about the evaluation process. And

one of the things that I did before I came out here for this meeting was, I asked -- I sat down and talked to him and asked him to explain to me a little bit more, as far as insight. And I don't know how many of you are familiar with the full -- how the Federal Advisory Committee Act works, and the federal advisory committees, but there actually is some justification that it has to be reported back to the Office of Management and Budget, as far as how these committees are working and whether they are being effective.

Federally chartered committees have a charter that has to be renewed every two years, and justification has to be submitted as to why those committees are achieving what they were intended to achieve, or why they were originally established, as well as the need for their continued operation. Generally that process has been rather automatic. It has not been very extensive, and the agencies or the designated federal officials have provided the input for that. The federal advisory committees that comprise the health effects subcommittees -- there are currently four -- there are two vacant slots that have not been filled.

In the year 2000 the charter for this will have to be renewed, and one of the questions is, how do the health effects subcommittee -- you know, do they feel that they are accomplishing what they need to accomplish; how is the process working? And really it's appropriate for us to have more input. And the health effects subcommittees that are working together in this working group are actually looking at the whole process. So it's providing an opportunity for greater input. One of the other questions that may come up is there are two vacant slots, two potential committees that have not yet been established. Is there a need for those to be established or not, or are we doing fine with just four?

So that's where some of this concern comes from. That's where the National Research Agenda -- and that was something that Roger Briggs referred to earlier today -- and it is currently out for public comment and review -- is something that the agencies are having to do in response to the DOE appropriations committee. This is something that we are having to do to show that we have a coordinated public health plan for the various DOE sites, and that document addresses 17 DOE sites, plus the nuclear naval shipyards. That's something that we're having go put together in response to a legislative request. So that's some of the background that I have. Again, whether Hanford Health Effects Subcommittee chooses to participate or not is exclusively up to them. And by the attendance of three individuals at the workdays in Atlanta, they're not construing it as buy-in, but they would like for it to be a productive opportunity for you to see what the other groups have been working on, and to see where this is going, because this is actually a participatory research process.

MS. STEMBRIDGE: I have Linda and -- no. Jude and Trisha.

DR. VAN BUREN: Well, I appreciated those comments, Steve, wherever you went. I have concerns, as Louise does. I have concerns about human subjects, and that it is a research project, very much so. And yet I don't -- I mean, I guess I'd like to know, are they going to take our blood, our hair, our opinions? You know, it's just so nebulous. I'm concerned about the methods, because they've not been defined. And, as Buck said, it's a method searching a need, I guess.

But I also felt very much, at the meeting in Utah, that we were very different than the other committees, and that the other committees saw in us, in all of our rawness, our raw edges, our ability to take off the kid gloves and put on the boxing gloves at a drop of the hat, that they don't have that necessarily in each and every one of their groups, that diversity, that semicohesive -- I don't know what we actually have, but it's very different. So I actually felt that those other committees were looking to us for leadership, for some different kinds of approaches to problems, and very different kinds of problems, in that we do have nine tribes. We do have very different issues than some of the others groups, and that to have this thing occur without us would be a cake without the icing. And I also, in the conversation we had with everyone last month, it was clear that it didn't have to be we all walk together holding hands towards the sunset. The report could come out with, indeed, nonconsensus types of opinions, and that -- I thought that was good.

So I guess I'm not ready to have us jump out of this. I think it would be worth it, if these two individuals are willing to go and waste more time or invest themselves further. I think it's worth participating, because I think we do have something to offer that group. And it will go ahead without us, and it may have a very different face if we're not in that.

MS. STEMBRIDGE: Okay. Folks, I'm going to try and move us along. I'm concerned that what we're doing is having, in the plenary, the discussion I was hoping to have a very small amount of time in the work groups to cover. And what I'd like to do, if I can, is just sort of cut to the chase and move us along to work groups.

The question before you is: We said to the agencies from our last meeting, we don't want to do the national evaluation, we want to do our own. The agencies have responded by saying there is no money to do your own. The question before us is whether we want to do an evaluation process badly enough to take time, in its very finite form, from the other business before this subcommittee, to invest into this national evaluation to try and make it be something that is more along the lines of the evaluation we want. That is really the question before us. And we have people who are willing to go to Atlanta, but not, I think, just chomping at the bit to get there. So I'll take just a couple more quick comments, and then I really would like to have us disperse into work groups this afternoon. I have Trisha, Rachel and then Judy.

MS. PRITIKIN: I think this is directly responsive to your question, Lynne, and I wanted to respond to what Buck asked us, which was for a recommendation as to whether or not to send folks over to this meeting in Atlanta. And then we were asked, in the work groups, to try to come up with some thoughts on that. And I don't know, because I haven't heard Buck's presentation, and I don't know what it is he learned when he went back there and what he's found out. So how can I respond to your point until --

MS. STEMBRIDGE: He hasn't gone back there. The meeting is in two weeks.

MS. PRITIKIN: Hasn't he been doing some background work to understand what our involvement would be?

MR. CAMERON: We've had some conference calls and off-line conversations.

MS. PRITIKIN: Because I don't have that information to –

MS. STEMBRIDGE: Well, he gave a report back, in fact in the minutes from the last meeting. That was the basis for the plenary recommendation that said, we don't want to do this, we want to do our own.

MS. PRITIKIN: Because I was not there the second day, and --

MS. STEMBRIDGE: I think that that's, in fact, when it occurred, Trisha. Rachel.

MS. MOSES: Well, since this is part of the National Research agenda for HHES and all the other agencies, and in it something tells me that, when they're looking at research projects to do, they're looking at the resources associated with those projects. And perhaps we're part of their evaluation scheme or their evaluation scenario, but I -- the evaluation probably is going to take place, regardless of whether we decide to participate or not. I think the evaluation process itself is really still in the early stages, and I think that whoever goes can make an impression on how the evaluation scenario will come out.

And I think that, by allowing people on the committee to sit in there and then, you know, sit at the same table with whoever, and come up with an evaluation scenario or criteria that would best work for the subcommittees, to me it only makes sense to have people that are actually in these kinds of subcommittees and have been in this kind of a role, and kind of understanding the ritual and the ceremonies that take place at the these subcommittees, to go back and enlighten these other people, to give them an idea of what they're talking about.

My whole concern is, if we're evaluating the subcommittees, it's going to be real difficult because, as Jude said, all of these various committees throughout the country are different. And well, for instance, one difference, I don't know if the other subcommittees have a court reporter. At least we have established somewhat of a legal record, but some of these other subcommittees might not have that type of way of recording the institutional memory that they wanted to have at these various settings. And so there's any number of reasons to not be part of it, and there's also an equal number of reasons to be part of it. And I think at such an early stage of a process that's going to take place, to me it would be better to get in there and swim the few laps while you're still deciding how long the race is going to be, than to jump in at the very end and not be able to make it. It's a vague, amorphous thing that is being done, and I think internally there is probably a lot of political ramifications, if you think or read between the lines.

And I talked to the tribes about it and, you know, we have concerns. And we basically want to have a representative go to make sure that we have input into the evaluation process, and to make sure that that evaluation process is more like a freeway, where it's going both ways, because we have had a lot of influence, negative and otherwise, from the funding issues. We've had -- you know, we've had issues with the agency, others. There are so many issues that we haven't been able to get addressed. I see through this evaluation process that the subcommittees themselves can maybe get some of their concerns addressed, if not at least reviewed through such a procedure like this, but you can't do it unless you get in there early on.

And if they do evaluate the other subcommittees, it will have an effect on us, I am sure. I can't really say how. I'm not a tarot reader or whatever. I would be concerned about stepping aside from it and hoping that it didn't have any ramifications on me, because I kind of think that this whole research agenda that we've now just kind of just discussed, is part of this whole scenario of this evaluation process. And these are just some of the things that, you know, committees like us don't really have information on, and we're asked to really jump in there and play this game with them.

There's a lot of things that haven't been given to committees like this, and I'm not sure if it's an oversight or if it's meant to be. I think, knowing that there is a National Research Agenda out there and these kinds of things, if this is going to be part of their research agenda that they're going to fund down the road, then I guess what we have to do is go there and say, throughout your evaluation process, the subcommittees, at least with respect to the Hanford area, have worked effectively, and this is how and this is why. Now, beyond that, it's hard to say how they will use it, but I think we just need to be really cognizant of the fact that this is going to happen. And if you have a place to play in it, probably now is the time to, you know, make that known.

MS. STEMBRIDGE: All right. Judy, I'm going to give you a last word on this, and then we're going to adjourn to work groups.

MS. JURJI: Thank you. Like most of you, I'm concerned about the process just being this very elaborate, endless enterprise, and there's every indication that that could happen. I got cold shudders when I heard there was going to be a professional evaluator involved. That doesn't sound good to me. I was very disappointed to hear that we couldn't get funding for our own sort of site-specific, unique evaluation process, but it occurred to me that what we could do -- and I don't know how this will play with the whole rest of the subcommittees and the whole evaluation process, but it occurs to me that we could participate just as much or as little as we wanted. Perhaps there's certain aspects of the evaluation process that makes sense to us and that looked good, and we could say, we'll do that part but we're not going to do this other part. I would like to be able to have the freedom to be able to say, Hanford wants to participate in certain parts of it, but not other parts, possibly. If we're given an all-or-nothing, then that would be kind of a bad situation. We either would participate exactly in the whole entire process like everybody else, or not at all. So I'm hoping there's kind of a halfway measure that just gives us another option, possibly.

MS. STEMBRIDGE: All right. All of that being said, which probably has done more to muddy the waters than clarify it, I'm still going to send you away to your work groups. I put sticky notes on these report-out forms. With respect to the national evaluation, what I want you to talk about, to think through, is whether or not you believe it's worthwhile for representatives of this subcommittee to participate in the May workshops. I still don't think there's anywhere near enough information to decide absolutely and unequivocally one way or another. If you believe that we should ask some of our colleagues to volunteer their time and fly across the country to do this, what are two or three things that would have to be included in this evaluation to make it worth doing for us out here? That's all. Now, I have one quick announcement. If anyone besides Judith did not get the mega tome, the HTDS draft report, please see Van Chase. She will get you one. There is a sign-up sheet circulating for anyone who's interested in the HTDS information packet

that was made available at the Seattle meeting. If you haven't signed that and you want one of those packets, please be sure your name gets on that list.

MS. CAMPBELL: As you are having your work group meetings, please remember that the museum tour is starting at 5:15. We do have someone that is staying and keeping this building open. It normally closes at 5 in order to do that tour so we need to be on time for their benefit. I'm sure they have other plans for the rest the evening, so 5:15 sharp. We already have included the tour for the HHES members, and for the liaisons, others who want to come along, that are not part of the people here at the table, please see myself or Marilyn Underwood for setting up to go.

MS. STEMBRIDGE: All right. The Studies Work Group will stay in this room. The Public Health Assessment Work Group will be in the classroom to the left as you go out these doors, all the way to the end of the hall. Now, tomorrow morning we begin with work group sessions, public health activities, the PHAWG will be in this room, and outreach will be in the classroom all the way down the hallway at the left. We reconvene in plenary in here at 10:45 tomorrow.

(Meeting adjourned.)

PENDLETON, OREGON, FRIDAY, MAY 14TH, 1999

MS. CAMPBELL: Good morning, everyone. I have an announcement I'd like to make real quickly, before we get started with the report-outs from the work groups. As you all know by now, Lynne will be standing down in her duties as chair. The next meeting in July will be her last meeting. She has resigned as of August 1st. And it's therefore my challenge to find someone to replace her in duties as the chair. And what I would like to request from the members of the committee is that you take a piece of paper and write down your suggestions on someone to be the chair, so that we can consider those suggestions as we choose a chairperson, and hopefully we'll have an announcement by the next meeting on who the new chair will be. Again, just write it on a piece of paper and pass them up to me, or however you want to do it -- see me at break, whatever -- but I would like to have input from the committee before we make a decision. And I'd also like to ask Lynne to remind everybody on what her role is as the chair, so you can consider that also when you're thinking about who may be a good replacement.

MS. STEMBRIDGE: All right. Well, I sat and made this list, and I realized -- Linda?

MS. KIER: I'm glad you brought that up, Leslie, about considering what Lynne's role is, because the one problem I see with having a good chair, a person that has a long history of knowledge of the issues, and a person who doesn't hesitate to advocate for site populations is forced to wear two hats. And actually, in a sense, if, for example, we were to recommend someone and there was a consensus, and that person is greatly respected for their advocacy -- all of a sudden they're in a situation that it's really quite difficult for them to be as strong of an advocate, because they have to be an administrator, a traffic cop, prevent me from running with scissors, et cetera. So could you comment on that briefly? Or perhaps our present chair could comment on it, also.

MS. CAMPBELL: Well, I do want Lynne to give her comments, because she said it's on her list. Again, I'm not asking for a consensus. I'm not asking for a vote. It is the responsibility of the agency to choose the position. What I'm asking for are suggestions to help me in that choice. Okay? But I would like for Lynne to respond to some of the other kind of overviews of the role of the chair.

MS. STEMBRIDGE: Linda, I think what I'll do is just speak to your question first, and then I'll go through my list. It is certainly true that whoever chairs a committee, I think, bears a responsibility to be very clear about when they are expressing their personal views and opinions, and when they are caretaking the process and the work of the group. I had many of those same concerns when I was asked to chair this committee, way back when. It seems just about the time I left high school. And I will tell you that I personally have found that when there was something beating against my lips that I really wanted to say, more often than not it was said much more eloquently by at least one other person on this subcommittee, if not more. There have been very few times when I have felt that I just absolutely had to take off my hat as chair, and put on my hat either as an individual or as a representative of an organization. So that potential certainly exists, and that is not to minimize what difficulties that might present for someone else, but I think it is manageable.

The other thing that I wanted to preface this job description with is the fact that the time that is involved in this position has dramatically decreased from when this subcommittee was first impaneled. It used to be a full day a week at the very beginning, and that is simply not the case anymore. There is generally a couple of extra days between meetings; a meeting -- a day after the meeting to do all of the cleanup work, if you will; and a day in advance, in terms of agenda preparation and premeeting packet discussions and all of that. The meetings are fairly intense. My daughter, when she was younger, her -- the way she could differentiate what meeting I was going to was, is it the one where you have to pay attention all the time. This is the one where you have to pay attention all the time, if you sit in this chair. You cannot -- you know, you can't doodle, because that's when it all goes sideways. So there is no getting away from the fact that it is very energy intensive during these meetings.

So, that being said, I made a list of the "sometimes" things and the "absolutely always" doing things. So the first thing -- and this may change, with the will of the group and a new chair -- is that we have always striven to operate by consensus, with Robert's Rules as a fall-back position. So that mandates that whoever sits in this chair has an understanding of consensus, discussion, and decision making. Before a meeting, Leslie and I have discussions about building the agenda for the next meeting. As you have all undoubtedly noticed, there is a fairly standard format that we use, with some tweaking and massaging, but it is a fairly standard template. And then the process then is to fit the laundry list of what people want to do at the next meeting into that template. We usually have a discussion, much of it over e-mail, about a check-in on what will be in the premeeting packet. The chair is also the custodian of the health effects subcommittee's lending library, which consists of one of those banker's box things. And I was going to bring a list of our library stuff, and I forgot it, but I will have it at the very next meeting.

Essentially I just have a list on my computer of what we have and who's checked out what. And also between meetings, as the agencies respond to our advice and recommendations, those letters generally come to the chair and you have to track those responses. Sometimes between meetings

there are emerging issues. Example: the national evaluation this last time around. And when that -- when there is some emerging issue, it is the responsibility of the chair, I think, to consider how to proceed in a way that is equitable and open and accountable and will get the job done.

So during the meeting I think that my functions fall primarily into these areas: The traffic cop function, which we discussed a bit yesterday, which has to do with keeping us within the structure and the guidelines that we have all agreed to; keep the time, you know, at some point -- you're never going to adhere minute by minute to an agenda, but at some point you dramatically decrease your efficiency if you wander very, very far off of your agenda; ensure participation of both the subcommittee members and the public. I have to keep a running list of the action items, plenary advice, and next meeting agenda, and it's nothing fancy. I just have a piece of paper headed one, two, three, and write them down as they happen. There is some -- there is almost always some midstream adjustment of the agenda that has to be done. And as I mentioned before, be clear when you're offering personal input, as opposed to chairing the meeting.

After the meeting the responsibilities that the chair has is to update the action item list, which is on a spreadsheet in my computer; convey our advice and recommendations formally to the three federal health agencies in a letter; and any other correspondence as requested or decided upon by the subcommittee. The other occasional things that come up have to do with responding to the media. If, in fact, the agencies decide to do another national meeting, the chairs of the subcommittees participated in a number of conference calls to try and help them develop the agenda. And I have periodically done some new member orientation as that was needed, either in small group settings or individually. It is not -- I have not found it to be terribly burdensome. It is hard work, but it is also very, very rewarding work.

So I would encourage any of you who might be interested in this to not feel bashful about putting your own name on a piece of paper. Trisha.

MS. PRITIKIN: I wanted to know if cochairs are a possibility.

MS. CAMPBELL: No, not by the FACA regulations. You have a chair. If the chair is going to, for some reason, be absent, then we can appoint an acting chair for that particular time when the chair is not there. But the normal regulations of FACA is a chair.

MS. STEMBRIDGE: Other questions? All right. Fill out your sheets and get your suggestions to Leslie. Now, there are any other announcements? Herman?

DR. CEMBER: Pass it down now?

MS. CAMPBELL: Any time. Let me, just as an addendum, state that, just as there are decisions made on membership, that we've gone through this whole selection process and defining how it works, there's a similar process for the role of the chair, in that the agency can make a selection, but that selection does have to be approved by the Director of CDC and the Administrator of ATSDR. So it is not strictly my decision or an agency decision, but rather I will initiate it. And I do appreciate getting these suggestions. Thank you.

MS. STEMBRIDGE: And I am hopeful that at least the recommendation will have been made, so that at the next meeting we can have some overlap between myself and the person who will take over, and so I can give them that box, too. All right. Any other announcements before we move on to the day's agenda? Hearing none, then we will proceed with the work group report from the Public Health Activities. Jude?

DR. VAN BUREN: Okay. This morning we had seven different issues that we talked about. And first of all we addressed the national evaluation process, and whether or not we thought we should attend and what kind of questions we should submit to them. And we were fortunate enough to have taken an opportunity that the groups yesterday talked about it a whole lot, so they kind of gave us their recommendations, and so we didn't talk about it as much. And maybe I'll -- Del came up with this outline for consideration, with an emphasis on outcome. That was one of our concerns. And Del had five things that he came up with, that he had given, I think, to Buck earlier, and Judith in the studies group, that were five issues that you thought, Del, would be brought to the good of the order. Would you like to state those at this time, Del, or I could --

DR. BARTH: I don't want to steal anything from the report of the Studies Work Group, because I'm sure this is going to be discussed there. So let me just very quickly say that there are two aspects to this evaluation which I think need to be considered. One is process and one is outcome. And I believe that you really need to address both of those, but the emphasis definitely should be on the outcome. And I think it will be covered by the other group.

DR. VAN BUREN: Yes, we will let the studies group go into the detail. Anyway, our working group, with the consensus opinion that it was a good idea that we participate, find out more about what this is about, provide our input. And from this conversation came a -- an idea that we would like to bring to the plenary as a recommendation. And that is that ATSDR provide our outgoing chair compensation, or whatever she needs, to be able to write a historical piece about our accomplishments. And we came up with a list, and maybe this is appropriate for Judith to read the list. And we thought it would be appropriate for everybody to hear it, because we are in times of gloom and doom and no money, and it was rather encouraging to hear about all that we have gone forward with. And we thought a summary piece might be helpful for Lynne to do when she leaves, so she can go with this air of, ta-da, accomplishment on her tail, but also that this is the history.

The memory of this group is very important. And when we forget about how far we've come, it sometimes is real helpful to look back and see where you started. So I'd like to give the mike to Judith to give us that list. MS. JURJI: So anyway, I had asked the group for sort of positive and negative things that were a result of this whole process, and we were just starting to brainstorm, and all of a sudden just lots of stuff came up. And I just jotted them down, so they're not in any particular order. They're just kind of as people thought of them.

So we started with thinking of kind of the positive -- or products that the Hanford Health Effects Subcommittee have accomplished. First of all, it was just mentioned that, you know, we managed to put together a very diverse committee with diverse representation. And after starting out kind of with some difficulty, we managed to "cohes" or come together and bond and get to work. That is probably one of the big accomplishments. Obviously medical monitoring and the iodine disease

subregistry were two big products, still unfunded but, you know, we -- that took many years of working on those two issues.

We gave a lot of advice to various studies, including the Lowell Sever Childhood Leukemia Workers Study, we approved the study. We approved ATSDR doing a fetal and neonatal death study, which is still being worked on, but near completion. We advised against a population mortality study. We developed a uniform approach to setting of priorities for possible research studies. We approved the protocol of the infant death and fetal mortality study. We reviewed and literally restructured the ATSDR Public Health Assessment, which is still ongoing. We created a FAQ sheet, and I believe that FAQ sheet is in Spanish, as well, is it not, or –

MS. STEMBRIDGE: You know, I'm not sure. We've certainly created a photo novella template that was forwarded to the agency, and I'm not -- I have lost track of what happened to it beyond our commission of it.

MS. JURJI: This brings to mind why we felt we needed this kind of history lesson of what happened, because we were losing some of our trains of thought. Certainly there has been outreach to the Spanish, compliments of Ricardo Garcia, who's done radio announcements in Spanish talking about the various work of the HHES. Let's see. We advised and gave input to the Individual Dose Assessment projects. Those are the ones that the health departments are doing to come up with doses for people that were exposed and that whole project. We keep up to date with it, and we have been advised about that. We've given -- we weren't around when the thyroid study began, unfortunately, and when that protocol was being designed, but we were available to give -- around and gave advice to HTDS, the thyroid study, on public communication of the study results.

We gave support when it was needed to refunding of the Hanford Health Information Network and the Hanford Health Information Network archives. We've endorsed the HEDR completion task, which involved trying to ascertain what the dose reconstruction for construction workers at Hanford, migrant workers, Columbia River pathway, and -- yeah, those three. And one person mentioned that, you know, our bylaws and our mission statements and all the documents that we've created to create this Hanford Health Effects

Subcommittee are pieces of work in themselves, and that you can't take those for granted, because other committees might just have a few sentences. We really thought it through and have a more elaborate set of documents regarding that. We commented on and were able to get information on the Owen Hoffman SENES group on the Columbia River, where they extend -- that important project that extended dose to tie it to risk and cast doubt on this dose model, the HEDR dose model. We developed these action lists, the action item lists, which kind of came a little bit later in our process, but turned out to be a very, very important way of tracking what the action should be, vis-a-vis the agencies and various members and what needed to be accomplished, so we could track everything. That was an important step forward.

We also began without a court reporter, but later were able to get a court reporter, so we have this product, very detailed minutes. So it's a beautiful historical record, at least by the time we got that court reporter, on this committee. So in the future, if people want to really find out, you know, more about the way we worked on a day-to-day basis, they could read these minutes. So that was a really interesting product. We created these work groups, which are -- I think was a very effective

way to accomplish what we needed to accomplish. And many of us attended and reported back to the committee about all the workshops having to do with medical monitoring.

We endorsed the idea of having workshops where outside scientists could come and meet with members of HHES to discuss various issues regarding medical monitoring. Now, I'm sure we missed things, so I'm sure you're thinking of things we probably missed. Under failures, the things we mentioned were things like public outreach. We felt ATSDR blocked us to a large extent on this. There was no money for a newsletter, because of government statute requirements. We weren't able to have press releases or -- and we didn't have a way to get public announcements out to people. That was not funded. So we feel that that public outreach was probably our biggest failure.

So far we've been unable to get the funding for medical monitoring and the registry. And that's not our fault, that's the fault of DOE and Congress. We did get the Hanford Health Information Network to publish in their newsletter information of upcoming meetings and that sort of thing, and so that was one bit of successful public outreach, but very small. In general, there was a strong feeling that ATSDR controls the outreach, and that we didn't have as much impact on that as we would like.

And then under unfinished business, we just felt like the Native American issues have not been dealt with, river pathway contamination hasn't been dealt with. There needs to be further worker studies, migrant studies, and chemical exposures need to be dealt with. So that was kind of like four or five years in a nutshell there. But I encourage you, if you think of other accomplishments or failures that you think this evaluation committee should know about, let me know and I can add them to the list.

DR. VAN BUREN: Thank you, Judith. We thought this was helpful for ourselves, and that when Buck and Judith and Preston go to the meeting in Atlanta, it will help others to see what you can do, and I'm certainly sure that they're going to learn things that other groups are doing that we're not. But in terms of emphasis on outcomes, these are the outcomes that we have reached.

So our recommendation is that the group does send representatives to Atlanta in May, and that we continue to cooperate in this process and hope to turn it to the product that we would like it to be. So that's one recommendation. The second is that we do create this historical piece in a summary form that could be available to members of the -- you know, to us, and used as a document perhaps when we need to demonstrate our process and progress. And that might take some work, and Lynne may not want to do it, but we thought there should be a point in time at which we stop and take a breath and collect our thoughts, because I don't think anyone wants to go through three and a half, four years of notes, of lengthy court reporting, to try to recapture it. Do you want to take these one at a time?

MS. STEMBRIDGE: I think it's easier for us to do these one at a time. With respect to the national evaluation, what I want to do is just collect the input from the various work groups, and then we'll come back to that later on in the day when we have a sense of -- it may be that all the work groups have said pretty much the same thing, and so we won't need to have a whole lot of discussion. So I'd like to set that aside and just see if there is additional question or discussion about this

historical narrative idea. I have to admit, when you first said it I thought, gasp, but Judy's list is wonderful. Linda, and then Buck.

MS. KIER: I think this is such a great idea. I wish I had thought of it. I want to congratulate that work group. I'm not sure exactly who you all are, but you're pretty smart people. And I was just going to -- you know, I was all set with a little additional criticism, and then Judith included it, which was not that it's not wonderful to track accomplishments, which we at least have attempted, even though we were thwarted by budget in many respects, at least we shook hands with each other and came out fighting and came out with some kind of recommendations, as we were assigned to do. But you have included that there are things that didn't go so well.

And if we can pass on what we've learned through Lynne, this would be -- I think if I was on one of the other FACA groups, or any other citizen representative advisory group, I think I would very closely read, if we could put it through, such a history. I think it would be -- if Lynne's willing to do it and it can be modestly funded, it might in a way help her to bring closure. But there's a question we haven't asked her; and forgive me, if we have, I missed it. I gather, when you say you're stepping down as chair, that means you're off the committee? Because someone asked me, does that mean you're off the committee or just stepping down as chair?

MS. STEMBRIDGE: No. I'm be leaving the committee, as well. I'm taking six courses fall semester.

MS. KIER: You said you were going back to school, so --

MS. STEMBRIDGE: I'm seriously going back to school. So I will be -- not just this chair, but any chair.

MS. KIER: And it's almost like, with what Judith said, if the evaluation that we've been discussing, somehow what -- this list somehow, to me, has a lot of elements of the evaluation we've been discussing. In other words, this work group has done some of the plenary's work for it, in terms of the evaluation. Thanks.

MS. STEMBRIDGE: Buck.

MR. CAMERON: Well, I want to support the recommendation that you do a lot of work, Lynne. But I do think you're a repository of a lot of history that you've spent time digesting and probably understand better than any other individual; although, I must say, Judith's presentation of the history was, I thought, remarkably clear and cogent, and I'm just so happy that she is one of the other people who will be in Atlanta, since I don't have that history, but I just thought that was a remarkable presentation. Thank you.

MS. STEMBRIDGE: Any other discussion on this? Is there anybody who feels that we shouldn't do this? If I have time to do this, I can do this. If I don't have to have this finished by August 1st, if I can have like October 1st --

MS. CAMPBELL: I thought they were wanting to take it with them to the meeting.

MS. STEMBRIDGE: No, they were just -- the list that Judy read will be useful for them at the meeting, but the historical narrative, I think, will take a little more writing, a little more reflection, a little more polish.

MS. JURJI: And I will type this list up for you as a kind of a starting point and you can -- you know, because I'll need to type it up for the evaluation.

MS. STEMBRIDGE: Glyn?

DR. CALDWELL: I guess the only thing that I want to point out -- and I don't know that we weren't going to cover it -- but one of the things in these evaluation discussions by Buck and Judith and whoever goes is the whole idea of, what are the criteria for evaluation. We need to have a clear understanding of what we're trying to measure . up front, otherwise this will become an amorphous mass of junk.

MS. STEMBRIDGE: I'll add that on my running list. All right. Anything else on this? We'll consider that approved and move on. Jude?

DR. VAN BUREN: Okay. Our next item that we discussed was a little bit more about IDA. Ellen gave us some more figures, and I think it's important, probably because this is one of the things that's actually going forward. It's exciting to know they've had such great results and response. They sent out a mailing list of 45,000, basically using the HHIN mailing list, 45,000 requests, and have had an additional 12,000 requests. So that's at least 57,000 people who are aware of this effort. And they've had about a 70 percent return rate, and are doing a 1400-dose calculation. What they're trying to do is get at least a thousand doses that they can look at and see if those doses look reasonable, before they send out the first dose. So none of the doses have yet been sent out.

So once they have those thousand doses, they'll look at them, see if there's any strangeness in the data, and then send them out. In order to get that thousand points of data, they have to send out 1400 to get a 70 percent read. So they're working morning, noon and night, they have a 24-hour shift -- just about 24 hours -- and are in process.

There has been a bit of a change Bruce Napier made to the dose estimate in the HEDR model. And that was, after August of 1951, they determined there was an underestimation of release, and so they've done some changes to the HEDR model and those doses will reflect that change. The AG's opinion, final opinion on this was that the State of Washington does have to keep these doses, they have to be archived and for perpetuity or 75 years or however it's determined. And that, number two, these doses are all confidential, so that no information will be released until there is a court order.

So I think that's important for us to know that those two decisions were made. And there has been some discussion that -- well, that's another issue. Sorry, wrong sheet here. So there was really no recommendations for the plenary on this, it was just to kind of provide a little bit more update. And they have been funded through March of 2000, and they hope to be able to finish the work at that time, and they're working diligently to follow forward. Marlene?

MS. NESARY: I just was wondering if you could tell us kind of the range of some of the doses individually. You can't even say ballpark numbers?

DR. VAN BUREN: They don't know.

MS. HAARS: I don't have them now.

MS. NESARY: You don't have them?

MS. HAARS: And we're pondering just what can we do; what are we going to trend and what are we going to track. So the high/low, that has not been decided yet.

MS. NESARY: Okay. Thanks.

MS. HAARS: And I don't know if we will even release that.

MS. NESARY: Really?

MS. HAARS: Yes, because it is an individual, but I'm not saying yes, and I'm not saying no.

MS. NESARY: I mean as, like sort of a group, within the group of the first thousand, there were doses as low as "X" and as high as "Y"? You don't even know if you're going to do that?

MS. HAARS: Well, obviously we will know them. Whether that will be presented and released, I don't know. I don't want to say yes.

MS. NESARY: Okay.

DR. VAN BUREN: Okay. So there were no recommendations on that issue. The third thing we discussed was the Hanford Research Agenda, and that was the packet that everyone received in the shrink-wrap mailing, and I am encouraging everyone to read this. It's pages 15 through about 22 is the Hanford pages. And because most people had not read this before this meeting and were not prepared to make recommendations or make statements, we thought it would be most effective if everyone read this, at least these eight pages, and submit your comments to the address given on the documents at ATSDR by June 30th -- which is the deadline -- and with special attention to page 20, which is the gaps of information. On that page there's a statement that medical monitoring for thyroid conditions should be provided to those who want it.

And our concern is that Congress might see this as a real problem, and that we were going forth with the medical monitoring program, following the protocol and according to the eligibility requirement that was stated in that document. I don't think anyone on this committee ever felt that medical monitoring should be for the world, but that those people that met the eligibility requirements should be allowed to receive medical monitoring. So there are concerns, and we would like to encourage everyone to read this document and submit your comments by June 30th. As a group, I don't think we'll be able to do this, but it's very important that we make comments.

The other issue that Herman and others brought up were the concerns about health education, because there are statements that health professionals need more information about radionuclides. And our two points were, number one, that there needs to be some education provided to health professionals to recognize, not only exposures to radionuclides, but also to the other chemicals of concern that we've just begun to address with Hanford. So there are some real important points here that we need to read through, probably paying specific attention to the gaps on page 20. And I don't know, other than a recommendation in general that everyone try to spend some time and respond. Is there any other comment on that?

MS. STEMBRIDGE: This is not as chair, but just as a member. I am wondering if it might not be actually quite important for this group to at least send, as a consensus comment, that the recommendation for funding medical monitoring be as it was proposed. I am really concerned about this appearing to members of Congress as a gigantic blank check, and we won't get what we want because it will be lost in this fear over the budget thing.

So that seems fairly straightforward, and I'm wondering if that is something that we might not be able to submit as a comment, and perhaps carbon copy to the Northwest Congressional delegation and those in California that Trisha works with, as well, so that there are people on The Hill who know that we are not asking for the universe. How do folks feel about doing that?

MS. PRITIKIN: If it's a consensus, I have to recuse myself because it involves funding, so I just want to put that on the record.

DR. CALDWELL: I just want to say that that's why she's chairman, because she thought of that and we didn't.

MS. JURJI: Exactly. I think that's exactly what we should do.

MS. STEMBRIDGE: So these two recommendations are to encourage members to submit individual comments, and then we will submit subcommittee comments specific to the medical monitoring funding.

DR. CEMBER: So where do the individual members submit their comments?

DR. VAN BUREN: It's on your first page, it's the ATSDR address. There's also a Web page.

MS. JURJI: That's medical monitoring and iodine disease subregistry funding; they go together, really.

DR. VAN BUREN: The next issue that we were asked to address in this meeting was a representation of who we are. Are we well represented on this committee, in terms of the constituents that are interested and concerned and related to Hanford? And again, the other groups from yesterday had talked about this, and we were able to get a little head start on this because of those conversations. And it was confirmed, Madeline did confirm that Wilber and Bill will be

continuing with their seats on this body. Since they just came on, it seemed appropriate for them to continue the representation, so that was a comment for the order.

There was a concern that there needs to be an Idaho representative, other representatives, continuing African American representation on the panel. We talked about the possibility of Stuart Harris, because he is also very knowledgeable -- as well as being Native American -- on the issue of risk assessment, which we're all trying to learn more about, though there is concern about his availability and et cetera. There was the thought about an additional person being a Japanese American, because there were a group of Japanese Americans that lived in the area at the time, continuing needs for an anthropological, sociological, psychological aspect.

And again, the thought that perhaps some of the members who were removed from the last round be informed that they could reapply, and this was including Pete Chacon, because he is a Mexican American and we thought that would be appropriate, we needed that representation. And it was stated that -- I think that Leslie -- and maybe Leslie wants to correct me -- but the time period has been extended to the end of next week for this application process?

MS. CAMPBELL: What I stated was that the very latest to have it to us would be the end of next week.

DR. VAN BUREN: Do you have a date?

MS. CAMPBELL: The 21st.

DR. VAN BUREN: The 21st, okay. Were there any other comments about representation from our group?

MS. CAMPBELL: Jude, can you repeat the very first part where you were talking about Bill and Wilber? I just need to hear the wording of what you said.

DR. VAN BUREN: Madeline stated for our committee that Wilber and Bill will continue to sit on the HHES panel as representatives. I don't --

MS. CAMPBELL: The actual wording from the Intertribal Council is that they recommended, as they recommended the first time, that we consider them as the two tribal seats.

DR. VAN BUREN: Okay.

MS. CAMPBELL: I just needed to clarify that a little bit.

DR. VAN BUREN: Thank you. Okay. We received -- our next item was the medical monitoring and the subregistry. We received an update from Greg Thomas about the status of both medical monitoring and the iodine-131 subregistry. And it is currently in a congressional appropriations staffers -- it's in the congressional appropriations committee, and that members of ATSDR, HHES, DOE and congressional staffers are working through an agreement on when and if those funds will be released from the DOE budget for the medical monitoring issue. Dr. Falk from

ATSDR is a representative, and there are some concerns regarding risk, especially after the IOM report concerning the risk of thyroid screening. And now with the HTDS findings, that's again considerations that need to be made because of those findings. The subregistry is actually separate money, a separate issue, but that money has also not been released. And so there is hope that this will be resolved by the end of June.

It's not clear whether or not -- if the money is not released, because it was from the '99 budget -- if that money is not released, whether it will be passed on or passed through or just lost. And so we hope by the next meeting -- and I think I could get a nickel for every time I've said this -- but at our next meeting we will know something about medical monitoring. And again, as we are all members of the public, we've been encouraged -- we encouraged ourselves to do what members of the public might do, in terms of trying to support this work to go forward. Any other comments from the group about this, or statements?

MS. KIER: Forgive me if this has already been told to us, but I can understand the questions about medical monitoring, not necessarily agreeing with them, but I understand, I guess, the caution basis of them. But I guess I don't understand what excuse there is for the holdup of the subregistry money. Do we have any readout on that? Is there a medical risk associated with putting people -- asking people for data for a subregistry, that I don't know about?

DR. VAN BUREN: On page 18 of your health research for Hanford, they say ATSDR is developing an iodine-131 exposure subregistry that will assess a variety of health conditions in a cohort of 17,000 people exposed as children under age 6 during the period 1945 to '51 in the three-county region near the Hanford facility. That is under "activities." It is in the development phase, according to this document.

MS. KIER: So we don't really know if it's funding that's holding it up or technical development issues, from that?

MS. STEMBRIDGE: Greg, do you have something -- can you answer this question?

MR. THOMAS: This is Greg Thomas. The only thing I would say, Linda, is that even though there are separate pots of money, they have always been considered together as two programs that would run concurrently and, I think, kind of share information and feed off one another. So I think that I would assume that this work group is considering them that way also, and that to approve one, you need to approve both. So I think that's why they're -- one hasn't been approved versus the other, that they -- they go together. They have always gone together.

MS. KIER: And to me, I can at least understand that, if not agree with it. And I don't want to open a new can of worms, but if the one is going to be delayed, should we advise -- as a group or as individuals, do what we can do to some way say, "Hey, okay, go ahead and take your time to make up your mind about the one, but why hold up the other?" Or is that just simply not -- the way things work, that's simply not a feasible request? I seek guidance on this.

MS. STEMBRIDGE: Linda, I would say that if, in fact, none of the money it appears has been released by our next meeting, that the topic of whether we should recommend delinking, if you will, the subregistry from medical monitoring, might be a fruitful line of discussion for this group.

MS. KIER: For a next meeting thing or for a this meeting thing?

MS. STEMBRIDGE: For the next meeting because, if a miracle were to happen and the money's there for everything, then we can just have the party.

MS. KIER: Thanks, Greg. I really didn't know that they were linked in that way. But in a certain way, now that I know a little bit about how our government works, that does sort of make sense.

MS. STEMBRIDGE: All right. I'm going to take Marlene and then move on.

MS. NESARY: This is really for Greg again. Greg, when you made your presentation to the outreach group, you didn't say anything, sort of, about the machinations going on inside the appropriations committee. And I'm just interested, from Jude's comment, how are the HTDS results playing out in that discussion?

MR. THOMAS: I don't know that I can answer that. I mean, I'm not in those meetings and I don't know that it's appropriate to characterize those as appropriations committee meetings. They are high level meetings between ATSDR, the Department of Health and Human Services, the Department of Energy, and staff from the Congressional appropriations committee that oversees the DOE budget. And that's a work group that is meeting to discuss both medical monitoring and the subregistry, and I'm not privy to that.

MS. NESARY: So when the HTDS results came out, is that sort of a justification, a do-nothing justification? Is that how that's being played or --

MR. THOMAS: I'm sure that that has been a concern since the beginning, and why we have revised the program to try to be sensitive to some of the concerns about thyroid screening. And I think that we're -- you know, that information is trying to be conveyed to this group so that they are more comfortable with the notion of moving forward with the screening program.

MS. NESARY: Okay.

DR. VAN BUREN: Okay. Sorry, we're dragging our feet here. The third recommendation that we discussed and our final -- well, we didn't actually come up with a recommendation, but we thought we should bring it to the plenary and have the plenary discuss this. And this was the June 19th NAS meeting being held in Spokane. We had two questions. And one was, would ATSDR support an HHES person to go there; and the second is, would that person be representing HHES and speaking for them, or would that person be solely going to see the process, to be able to come back to the group and report on what they learned?

Steve Simon was approached about the possibility of taping the conference, the public meeting, and it's a possibility, but it's not clear how easy that would be. We felt that might be interesting, not only for the archives, but also for us to learn from this meeting. So we felt that it would be really important if people could go to that. It was really unclear how our role would be seen and what the responsibilities of that person or persons would be, but we thought it was worth seeing what the group felt about that. So that's a kind of issue for the plenary. And the last -- do you want me to stop? Because I think other groups may want to talk, and maybe this is another issue. Do you want to --

MS. STEMBRIDGE: I guess what I might suggest with this is that we hold off the discussion on this until we see if, in fact, there is subcommittee advice that we're going to -- comments that we're going to be offering on HTDS, in which case the representative would have something to offer at the public meeting from the HHES as a whole. Now, if, in fact, we don't have comments, then the question is: Is there support for someone to go and simply observe? And that's a slightly different animal. So I guess I'd just like to hold this until we hear from the Studies Group.

DR. VAN BUREN: Okay. The third recommendation from our subcommittee was that we do have on our agenda for the next meeting the CDC response to our concerns about the RFP task order process. This has been put on the agenda a couple -- well, I don't know, but we thought it was time to bring this forward and have CDC, Mike Donnelly respond to the concern, to outline the process, make sure we understand, and see if we can resolve some of our angst about this process.

MS. STEMBRIDGE: We need to have some quick discussion on this as an agenda item. Were you thinking like about an hour? I already had in my notes that we requested additional written information about task orders and how they vary from RFPs. So I would expect to request that that information be available in our premeeting packets, to request that Mike Donnelly be here to answer questions about the written information that we've seen, and to have some time for discussion. So I'm thinking it's going to be an hour. Del?

DR. BARTH: Just a very quick comment on one thing that Jude did not mention, that I think may come back to haunt us. And that is the errors that have been found in the HEDR dose model probably will not change the range of possible -- the uncertainties in the dose, but they can, in fact, change the median and likely will. And if we have eligibility requirements for medical monitoring based on the median, we may have to consider that very carefully, whether or not we need to redo median calculations with corrections in the model.

DR. VAN BUREN: Thank you, Del. I didn't quite know where to put that.

MS. STEMBRIDGE: All right. I'm not sure who is doing the Studies Work Group report -- oh. Judy.

MS. JURJI: Louise asked me to report.

MS. STEMBRIDGE: Judy, before you do this, we're at 11:45 and I want to check and see if there's anyone from the public who'd like to offer comment at this time. If you would, I'd invite you to

step to the floor microphone. And you are free to identify yourself or not identify yourself for the record, as you choose, but we welcome your comments and your input. All right. Having no public comment, we will proceed with the Studies Work Group report.

MS. JURJI: Louise couldn't be here, so she asked me to fill in for her. There were four topics discussed during our meeting: the thyroid study, HTDS; the second was the National Academy of Science meeting and the speakers that are going to be at that meeting on June 19th in Spokane; three, the fetal and infant death study, which is now out for review; and four was the evaluation process for the Hanford Health Effects Subcommittee. Most of the discussions really were about the National Academy of Science meeting that's upcoming, and the evaluation process that's beginning and that HHES is beginning to participate in, so that took the bulk of the meeting. Let's see. Recommendations -- and I'm just reading Louise's handwriting, so I hope I get everything, so other members might want to contribute if I misrepresent things.

Let's see. Recommendations: that we send -- for the National Academy of Science meeting, it was felt that we need to send comments from the December -- or since sections from the December and February Hanford Health Effects Subcommittee transcripts related to the discussion of the release of the HTDS to the public, that we need to -- rather than reinvent the wheel -- go back, pull out from the minutes anywhere where we discussed HTDS and its releases of its study information to the public. And Louise identified that as being from the December and February HHES transcripts. We felt that would be a good thing to just send, since that was a piece of work, we did give some advice to HTDS about release to the public, that that needs to be documented and sent to the National Academy of Science. We also felt that people from this committee should send in individual comments to the study itself, to the National Academy of Science. So that would be on individual. The group thing would be the December and February transcripts related to the thyroid study.

MS. STEMBRIDGE: To the release of the information.

MS. JURJI: To the release of the information in the thyroid study.

MS. STEMBRIDGE: Okay. Because we did have consensus advice about the release.

MS. JURJI: It's essentially a recommendation just for individuals to send comments to the National Academy of Science and the CDC as well. We also -- but the third one was that we send -- this is more of a recommendation from this body -- that we send a letter to the National Academy of Science requesting specific attention, in addition to the issue of whether the public -- the release of the thyroid study data to the public was adequately done, that we also send -- we ask them to pay specific attention to the issue of screening bias and the apparent high incidence of thyroid disease. The letter should ask the National Academy of Science to carefully evaluate the literature that addresses screening bias in thyroid disease, and to consider a possible comparison study of a nonexposed population, to ascertain the prevalence of thyroid disease.

So it's sort of two recommendations, then, regarding the National Academy of Science, one having to do with just sending some information to the committee about that, what we recommended to the study and to the CDC specifically, regarding release of the information to the public of the

study. And the second one, a letter to NAS requesting specific attention to the issue of screening bias, et cetera. Shall we just stop and see if there's discussion on those?

MS. STEMBRIDGE: Yes. Let me just check back through these to see if there is anyone who has concerns about this first recommendation to pull out our advice to CDC about the handling of the release of HTDS. Trisha?

MS. PRITIKIN: It's actually an additional subpart to that request, which I think is a good one, and that was that we requested access to the study before it was released by HHES, before it was released to the public. If you'll recall, we made that request that we could look at it, so that we would be prepared to deal with the media before January 28th. That should also be in the transcripts.

MS. JURJI: See, if that's in the transcripts, that'll be covered. Louise just felt that the -- hopefully, I mean, somebody needs to go back and look at the minutes from February and December to see what's there, but she -- she was confident that all that stuff is in the minutes and that it would be just a fast and easy way to get to the National Academy of Science what had happened.

MS. STEMBRIDGE: My recollection is that there was in fact, in the advice and recommendation transmittal, specifically to CDC, a whole list of our consensus recommendations about HTDS, and what Trisha was alluding to was contained in that letter. So we could have not just the was transcript portions, but a copy of that letter.

MS. JURJI: Any letters, any documentation related to the advice that we gave to CDC and HTDS about public communication issues.

MS. STEMBRIDGE: Glyn.

DR. CALDWELL: I think I agree with -- I don't disagree with the idea of doing this. My concern, and you may have just solved it, is that if we send transcripts, we'd better look at them carefully to make sure that they're clear what we meant. Just having conversations back and forth can sometimes leave the wrong opinion, when they're just lifted. And so I think you reminded me of that letter, and that may be what we really need to do, send the backup material from the letter, which, to some extent, explains what we wanted. I think that's okay.

MS. JURJI: Yes. A cover letter would be helpful to explain what the gist of it was.

MS. STEMBRIDGE: Okay. Any other comments on this? All right. Then I want to be clear that there is, in fact, not being offered to the plenary consensus comments on the thyroid disease study. Darrell?

DR. FISHER: How would you recommend, then, that we transmit individual comments to the National Academy of Sciences?

MS. STEMBRIDGE: I think you can just write them a letter.

DR. FISHER: As an individual member of the committee? The reason I ask this is that, in our last meeting, the whole committee was asked to provide comments, and we were all sent a complete copy of the draft report to review. And I don't know how many people actually provided comments to Louise, but it seems to me that that process of gathering and collecting the comments somewhere has fallen down.

MS. STEMBRIDGE: I had a brief conversation with Louise about this yesterday and, to cut to the chase, she got one or two sets of comments by the date which she had requested them. And so her conversation with me was she was aware that some people were developing comments, but they were not made available in time to work them through and be put forward as plenary advice. So what it looks to me as, at this point, that other than reiterating our recommendations about the public release and information access, that comments will need to go from subcommittee members as individuals to the NAS and the CDC. And that's what I was striving to get very clear on the record, was that, in fact, there are no consensus HHES comments on the thyroid disease study. Herman.

DR. CEMBER: But if we send one of these, we may sign it so-and-so, member HHES, to indicate that we are a member but not speaking for the HHES.

MS. STEMBRIDGE: Right, as long as you put that you're offering individual comments. And the last recommendation I have is a letter to the National Academy requesting that they evaluate the existing literature about screening bias -- and Judy, I'll need to get your exact wording -- and that they consider doing a comparison to a nonexposed population, to ascertain the prevalence of a nonexposed population, and then compare the two.

MS. JURJI: I think we could probably consider asking the CDC for such a study. Let me read it here, if I can, Louise's writing. Send a letter to NAS requesting specific attention to the issue of screening bias and the apparent high prevalence of thyroid disease in the HTDS. The letter should ask NAS to carefully evaluate the literature that addresses screening bias, and to consider -- and this is a missing word, but I think she probably put, to consider advising for a comparison study of a nonexposed population to ascertain the prevalence of thyroid disease.

In other words, the idea was to -- the thyroid study itself is probably going to be coming up with the literature that will -- they hope will validate why there's such a high incidence of thyroid disease in their study population. And what this letter just is asking the National Academy of Science to do is just to evaluate that literature that the HTDS will come up with, and to really -- to see if they agree that it does, in fact, answer the question of why there is that much thyroid disease. And then if there -- and then, if not, to consider advising CDC to do a comparison study of a nonexposed population to ascertain thyroid prevalence.

MS. STEMBRIDGE: So what we're asking them to do is evaluate and recommend what, if anything, should be done?

MS. JURJI: Yeah, and that issue is one that is of grave concern to many people at HHES.

MS. STEMBRIDGE: I have Linda, Glyn and Herman.

MS. KIER: Others have covered this base, but I think what we want to make clear to NAS is that, regardless of how we stand on the HTDS study, or what we may put in terms of our personal critique of it, when there are positive results, but the -- when there are positive results within a report, and yet they get explained away after the fact as, well, there's a lot of thyroid disease in that area. The public, the lay public has great difficulty in then having credibility in scientific studies. And I'm not now speaking for or against HTDS, because I felt I learned a lot as a member of the lay public from the presentation by Scott Davis and Mr. Kopecky, Ken Kopecky. And I felt they had brought hearing ears to our critique, and were willing to hear from the public and to take in our trouble with it, the things that we didn't understand about it.

So I came away from their presentation with a feeling, and reflecting on some of the tough questions that came from Dr. Fisher, who asked some very tough questions, but questions that deserved to be heard. And to get some kind of clarity and understanding from the lay public, we need to address the issue of apparent positive findings, or the NAS needs to address this, if they wish to have these expensive studies have any kind of credibility. Because when people see the positive findings, and then see the overall result is, oh, no real problem, it raises a big question mark about the whole government-funded scientific establishment.

So I'm hoping that what we're saying to the NAS will be clear why we're saying it, and we're not necessarily saying it trying to criticize them or criticize the study, but because we're trying to come to grips with issues that the laypeople need to -- are asking us, and need to give understanding to.

MS. STEMBRIDGE: Okay. Glyn?

DR. CALDWELL: My comment was primarily related to the idea of doing a study elsewhere, because one of the things that we're going to have to deal with in CDC, if we make that recommendation, is going to have to deal with the issue of comparability. If we take and try to request a study to ascertain prevalence elsewhere, we're going to have to do it almost in the same mode that we did HTDS. It's going to take a long time, it's going to be very expensive, and you may wind up with something different; but once you get it different, you may not be able to explain it anyway, because it's an entirely different place, an entirely different population, with entirely different genetic, environmental, and socioeconomic background. That's going to be a very difficult thing to do.

That's why you hope, that when you do a cohort study, that you have a group that has either low or zero exposure, that that becomes your internal comparison. That was part of the reason for adding some of these counties that were more or less peripheral. I'm just concerned that that recommendation is not going to go. I'm not opposed to it, but I think it's going to be one that will be very difficult to get implemented.

MS. STEMBRIDGE: I think those are very valid points. What I heard Judy reading is that we are asking NAS to evaluate the positive -- the section of the report that did have the positive finding, and evaluate the literature that is available, and consider how better to present that information, so that it's understandable. I presume that part of their process is an evaluation of whether or not it is presented in a way that is defensible, and if there are next steps, we are looking to NAS to

recommend those to CDC. So we're not saying, "Do this," we're just saying this looks like a hole, we don't understand it, please be attentive to this area.

MS. JURJI: I think that characterizes it very well.

DR. CEMBER: I was going to make exactly the same comment that Glyn did, and I was against this proposal because I thought it would take at least five years more to come out to do this. But since I have the microphone, I just wanted to make a comment on what Linda said. I don't think that the report said that there's no problem. The purpose of the study, I believe, was to see whether there was a relationship between radiation and thyroid disease; and the report or the study found no relationship between radiation and thyroid disease, but not to say there was no problem.

MS. KIER: Radiation from Hanford.

DR. CEMBER: Yes, yes, radiation from Hanford. But the higher than expected incidence may be due to something else, we don't know, but the study did not address that. So the study did not say that there was no problem. Okay. I just wanted to comment on that. Thank you.

MS. STEMBRIDGE: Judy, did you have something else you wanted to add?

MS. JURJI: Just to get back to the recommendation, if people here have problems with the last part of that statement, about advising some kind of remedy if that is needed, or a comparison study, perhaps we could leave that out. But it still strikes me that sending a letter to NAS requesting specific attention to the issue of screening bias, and the apparent high prevalence of thyroid disease, and ask them to carefully evaluate the literature, just seems extremely reasonable to ask. And without asking for the remedy to the situation, if they find one, just leave it there.

MS. STEMBRIDGE: All right. Do we have some clarity on this? Folks, this is -- I see heads nodding. Okay. Noted as advice and recommendation, with a letter to write. Anything else?

MS. JURJI: Yes. I'll try to go fast because I know we're into our lunch break here. We just had some recommendations for speakers for the National Academy of Science meeting. There is already some talk that we're going to be invited. Jim ^ Ruttenburg, Bruce Napier, Owen Hoffman, Rudi Nussbaum, Lynn ^ Lyon. I think -- Let's see. It was thought that Steve Wing would provide information on statistical power and dosimetry. Let's see. Oh, and somebody from the R-11 survey, we'd like to see there. I think that will happen whether there's a recommendation from this committee or not. I think that covers it.

And then we -- but the main point being that we felt it would be good for someone, or two people from the Hanford Health Effects Subcommittee to attend the meeting and report back to us how it went. But also possibly be funded to go as a speaker from the Hanford Health Effects Subcommittee, and just address -- specifically to address the issue having to do with public communication of the thyroid study results. And two names were put forward, Lynne Stemberidge and Marlene Nesary. And we thought we needed a person who has had a longer history with it, and that's how your name came up, Lynne. And then the fact that you were right there in Spokane, I think was why your name came up, too. And then Marlene, I think we heard that she was

planning to attend, and we thought that should be a good person, as well. Since then I've talked to Lynne. And I understand, Lynne, you're not available?

MS. STEMBRIDGE: No.

MS. JURJI: And so I haven't -- you know, I don't know what everybody else thinks, but another person that is hoping to go is Jude Van Buren, and perhaps Jude Van Buren and Marlene could go. So I just wondered what the plenary thinks about that. And then the other issue came up -- and maybe, Jude, did you already talk about this, the issue of whether, for HHES, one or two representatives could be funded to go? And this was a question for Leslie.

MS. CAMPBELL: Right now?

MS. JURJI: That's June 19 in Spokane.

MS. CAMPBELL: We did have representation at another NAS meeting already, and I can't give you an answer yet on this, because I have been told by our budget folks that we are very, very close to having enough money for the July meeting, and I have to be very careful on any expenditures. And I'm fighting for a bigger budget for next year so that we have more money for some of these things. At this point, though, I'm going to have to get approval. I cannot just say, yes, I can send people, because of the budget issues.

MS. JURJI: Okay. Certainly we would hope that Marlene and Jude and others can attend in any case, even if the funding is not there, and will hopefully report back to us what happened at that meeting. Okay. Regarding the national evaluation --

MS. STEMBRIDGE: Judy, can I stop you for just one minute? I think that there is this recommendation rolling around on the floor about sending official subcommittee representation to the NAS meeting. One component of it is the funding, but I also think there is an additional component about whether or not we want to request the funding. And I need to say that, given the fact that we do not have consensus recommendations on this specific study, given the budgetary constraints, I personally am not feeling very comfortable about requesting official subcommittee attendance at this, because we did have people go to the NAS meeting in Atlanta. We are submitting a number of letters. Steve was here and did have the benefit of our conversation at this meeting.

Now, if there is some additional discussion about this, I think that we should have it, and have some clear recommendation, if, in fact, we're going to have one, for Leslie to take. This feels a bit nebulous to ask her to go to bat for budget, when we're just kind of mulling this around in a mushy form. Judy?

MS. JURJI: Well, you know, again, details of the thyroid study I think are diverse to this group, and in terms of reaction and critiques, but we have identified those two areas that seemed to have already improved, which is dealing -- the outreach to the public or the communication to the public issue, which could be presented by an HHES person; and then the issue of just the concerns

regarding screening bias in the literature and understanding and evaluating the literature that supports or doesn't support the screening, the thyroid prevalence outcome.

And those two things -- of those two things, the thing that I feel might be important is the -- to answer questions. You know, I think the screening bias thing will be very clear. They already know they're going to have to deal with that. But regarding the communication of the thyroid study results to the public, and the advice that we gave, I'm worried that the minutes might not answer all the questions that the National Academy of Science members might have regarding that. And if there was somebody there that could answer questions, that might be really helpful.

MS. STEMBRIDGE: It would be, although I do believe that we also sent -- I recall sending a separate letter to the NAS about -- with recommendations about how they handled release of their evaluation of HTDS, that they come back to the Northwest to do it, that they try and perhaps have it in conjunction with one of our meetings. So we are also on record with not just recommendations to CDC, but specific recommendations to NAS about their public process as well.

Other thoughts on this issue? People are ready for lunch. You're starting to slump. How do folks -- I mean, we need to give Leslie something, because it will be a battle for her, and not necessarily one I'm hearing that she thinks that she can win. Do we want to ask for official agency support for someone to go? And essentially it will be to read the letters that have been submitted into the record, because there's nothing further that someone as a representative of the subcommittee could say. Linda?

MS. KIER: I hate to create more work, but if there is a possibility that this could get funded, and everyone else is in agreement, I, as a long-term member, would be willing to sit down with anybody else that's interested, or conference with anyone else interested, including people that may not agree with how I or other people feel on -- you know, we would have a diversity of views if we were to send a representative member, which we should have all funneled through the Studies Work Group, and all of us, except, I think, one person dropped the ball on that deadline. I know I did. I actually had a file started and I don't know what happened. I had too many thick mailings that just -- what can I say.

Anyway, if it would be of any help, and if the group wishes to support it, I would be happy to sit down with anybody else, including people that might not share my views -- such as Herman or Darrell Fisher -- and, you know, have on this hand and on the other hand, there's these concerns, and then brief Marlene or Jude or whoever goes.

MS. STEMBRIDGE: I think that's a good idea. My concern with that is it's going to be outside the public meeting of this subcommittee, and everyone else won't have a chance to look at it. I think it's a good idea, I just --

MS. KIER: I understand, and I see the objections, and I'm not trying to create work. But I know, for example, Darrell slogged through that whole thick document, which I only slogged through a part of. And I was just trying to say that I would be willing to do whatever I could to do some kind of representation.

MS. STEMBRIDGE: You know, in the interest of the time and our extremely low blood sugar, and people's eyes beginning to glaze over, I think what I'd like to do is just get a thumbs-up or thumbs-down about requesting agency support for people to go and read into the record HHES correspondence on the thyroid disease study, and then we'll just take it from there. Bill, did you have something you wanted to add before we do this?

MR. BURKE: Yes. It's unrelated to what we're talking about, but I just got a note here saying that this budget -- and I mentioned this to the outreach committee -- that I have the 2000 budget from the Department of Health and Human Services, and you can pick one up on the table outside if you so desire. Thank you.

MS. STEMBRIDGE: Thank you. All right, folks. So, if we can have just a quick show of hands. Raise your hand if you believe that we should request agency support to have subcommittee members stand and read into the record our correspondence regarding the thyroid disease study. Hands in the air, keep them up, I'm a slow counter. Seven. Hands in the air if you believe we should not request agency support for the whole blah, blah, blah, blah, blah, blah. All right. Do I see somebody standing aside? That's pretty clear, although -- yes. Glyn?

DR. CALDWELL: I don't know if this is a clarifying question, but what do we hope to gain by having somebody read it into the record? We can send it for record. That's my concern with this. I don't have any objection to somebody going to observe, but to go and read something into the record that we can just pack up and mail strikes me as a waste of money. Sorry.

MS. STEMBRIDGE: You know, I think I'm going to just play traffic cop. I think what is dividing this group about this now -- and I think, frankly, we've come as far as we can with this. We're just going to have to say to the agency we were divided. You know, the people in the room, we tested, these many thought it was important, these thought it was not, you know, and leave it to them, which is ultimately where it will rest anyway. All right. Anything else from studies, before we break?

MS. JURJI: I can't comment on that?

MS. STEMBRIDGE: No, we're through with that. I'm going to be dictatorial here. I'm hungry, my stomach is growling. I can almost hear other people's.

MS. JURJI: There are other things, and I'm just wondering, should we wait until after lunch regarding evaluation and representation?

MS. STEMBRIDGE: You know, if you can move through those quickly, I don't think we need a full recap of the discussion, just the decisions.

MS. JURJI: Right, let me just move through it real fast then. Regarding, I think, real quick, new representation -- okay. From labor, Idaho representation, continued African American representation. We need representation from an environmental group. The name Tim Connor came up, and was thought to be a good candidate. And we felt there needed to be representation of

a toxicologist, a toxicologist was needed, and three names were submitted. One came with kind of the strongest recommendation, and that was a man –

MS. STEMBRIDGE: Judy, I'm going to preempt you here, because those names -- if they don't get their papers in, it won't matter who those people are.

MS. JURJI: Okay. So what I'll just say to Buck and Herman and anybody else who gave those names for toxicologists, get those names in to Leslie, twist their arms.

MS. CAMPBELL: No, no. Don't get the names in to me. They have to talk to these people and get applications in to me.

MS. STEMBRIDGE: Names and addresses and phone numbers at this point will not do the job. We need their paperwork, we need their actual application for them to be considered.

MS. JURJI: Okay. And then where do we get the applications from?

MS. STEMBRIDGE: There are some out on the table out there.

MS. CAMPBELL: They were sent out in mailings to everybody. You have them, it's just a form. There's more out there, but we've sent this out, you know, a couple of months ago.

MS. JURJI: Okay. I realize that, I think. But, you know, once you talk as a group, you come up with other ideas, and that's very different from being -- okay. Regarding national evaluation needs, there was a clear consensus that the emphasis should be on an outcome evaluation and actions taken on outcomes. There was also a concern that public outreach and public input should be evaluated. Del Barth had a list of things that he thought -- and we agreed -- should be evaluated: the mission, how effectively we're organized, operational guidelines, products, actions on products, and community input and outreach. And finally Glyn's statement, we all agreed with it, that there needs to be at this upcoming meeting a real strong sense from the group what criteria for evaluation is being created. There you have it.

MS. STEMBRIDGE: So your group was in favor of you brave souls going to --

MS. JURJI: Yes, sending forth with -- but I think there was a strong consensus that we still are not saying that we're committing to the evaluation process. But if we are able to get what we consider our needs for an evaluation on the table, that then we'd consider it again.

MS. STEMBRIDGE: Good enough. Anything else from studies or for studies? All right. We are now adjourned for lunch. I understand we're somewhat at the mercy of the Kinship Cafe, but let us try and be back here promptly at 1:30 so that we can get through the rest of our day's agenda.

(LUNCH.)

MS. STEMBRIDGE: Before we start with the Outreach Work Group's report, if you are a subcommittee member whose term is set to expire at the end of this year, and you do wish to

continue, please fill out the form or your name is not going to be in the hat. And my one wish is that there will be a solid core of continuing subcommittee members, so that there is some institutional memory available at the table. So, please, do your paperwork, please. Leslie will start a wall of shame, and people whose forms are not in will have their name blazoned across the wall.

MS. CAMPBELL: Every half hour I'll put another name on the wall.

MS. STEMBRIDGE: Yes?

MS. KIER: We're talking about this form, right?

MS. STEMBRIDGE: The nomination --

MS. KIER: No, sorry, wrong form.

MS. STEMBRIDGE: It says Nomination Form on it.

MS. KIER: Okay. Sorry, wrong form.

MS. STEMBRIDGE: All right. Marcia, are you doing the --

MS. WOOD: I just wanted to say that I wanted to be sure that Marilyn has me, the rest of my --

MS. CAMPBELL: Okay. If you've given it to her, that's fine.

MS. WOOD: Well, I sent it in, and then one of the two of you were supposed to have gotten it.

MS. STEMBRIDGE: All right. Anything else? Okay. Now we'll hear from the Outreach Work Group. Marcia and Marlene, take it away.

MS. NESARY: I'll start, and get help from my crew, Marcia and the group. I'll just kind of go down the form here, the report-out form. The topics that we discussed included work group members, constituent concerns. We went around and heard from each member what kinds of concerns and questions they had gotten back from folks.

And for instance, Ricardo reported out that, after the last HHES meeting, he did his half-hour radio show, and there were several people who called in then and wanted to talk about the thyroid study, and who are concerned about their own health situations and the potential links to Hanford, so he referred them on to HHIN. A couple of the tribal members also reported that they had -- I asked what kinds of discussions they might have had in their worlds about the HTDS study, and they reported that folks were kind of feeling a little helpless, in terms of being able to do anything, not wanting to talk about it and maybe not feeling there was much that could be done from their point of view. Is that fair, Bill? No, yes?

MR. BURKE: I'm sorry, I didn't hear you.

MS. NESARY: I was just asking if that was a fair summary of what you had to say about tribal responses to the --

MR. BURKE: Yes, it was. I have -- I just have some trouble hearing and, I'm sorry, I didn't hear the question.

MS. NESARY: All right. Thanks. We also had a presentation by Greg Thomas around the medical monitoring FAQ sheet, the new version of that and the distribution thereof, and also some tie-in from the FAQ sheet that exists for the iodine subregistry, and that those two FAQ sheets should travel in parallel wherever they're distributed. We also talked about the Public Health Assessment outreach plan and some components of that, and for the first time there was some discussion -- really, at least it was the first opportunity I had had to attend the Public Health Assessment Work Group, because they have always been at loggerheads, schedulewise. And so I had read some of that document, and this was the first opportunity I had had to see what we were outreaching to or from, so that was useful. We also talked about the membership and evaluation process and we have some recommendations to follow up with those. We reached consensus on a couple of items.

One of those, that came up during our discussions of individual members' constituent concerns, was that we'd like to recommend that the HHES have one meeting per year on tribal land. And Martha had told us that the ICHHP had also discussed this in their meeting on Wednesday, and so this is a bit of a joint recommendation, I guess. We understand that there, you know, are always logistical issues to be settled, but that's our recommendation, one meeting per year on tribal land.

MS. STEMBRIDGE: Marlene, should we just test for consensus as we go along with these, and then we won't have to come back?

MS. NESARY: Sure.

MS. STEMBRIDGE: How do folks feel about that one meeting a year? I think it would be wonderful. It's certainly been just really terrific to be here.

MS. NESARY: At least one meeting a year to be here.

MS. CAMPBELL: You're pushing.

MS. NESARY: I'm pushing.

MS. STEMBRIDGE: So one per year is the recommendation.

MS. NESARY: We also had a long discussion on various Web sites and use of the Web and the Internet as an outreach tool, sparked by -- at least for me, the coming here to Pendleton last month for the Radiation Health Alliance meeting, and hearing that the HHIN archives site had been getting thousands of hits of long duration. And my brain popped open and I thought, "Well, now, that's certainly different from what we see in public meetings. There are not thousands of people willing to spend 20 minutes or whatever, digging into the issues in public."

So I'm thinking that there -- and we talked about how there may be a whole layer of folks that we're not making contact with and not offering the opportunity to get feedback from them, because we're not really utilizing Internet sites and resources. So we'd like to recommend to the board -- or to this committee that we develop Web sites, not only to reach out to the public, but also to keep contact with other site groups within the country, so that the information flow goes several ways, within the agencies and across the sites and back and forth into the public. So it's a recommendation that we exploit that possibility. And the form of that and the timing of that will be dependent on all kinds of issues, I'm sure, but we recognize that that's an opportunity we're not taking advantage of. Any questions on comments about that, or did I miss some piece of that argument or that discussion?

MS. STEMBRIDGE: Glyn?

DR. CALDWELL: I guess my question is really directed to Leslie. Can this committee develop a Web site? Because I don't know that anybody around here has that capability. I know I don't. And second, can the center create a Web site for us?

MS. CAMPBELL: This is being explored with the other health effects subcommittees. And the one that is furthest along is the Savannah River site, and they are developing a Web page. Let me be more specific. The National Center for Environmental Health is developing a Web page for Savannah River, and I believe it is also being explored with the other two subcommittees that are led by NCEH. And we have had some preliminary discussion between ATSDR and NCEH and NIOSH on having some connectedness between Web sites, so that if someone goes into one, they can see, oh, you can look at this one also, and so forth.

Now, I'm talking just Web sites about these subcommittees, I'm not talking about interconnections to the world, but that is being explored and it's being initiated, actually, for Savannah River. The National Center for Environmental Health has funding to have staff work on this particular project. Van is shaking her head "yes," so I'm saying everything correct here. ATSDR does not have any such funding. I would be glad to take this back and see what we can do. I think if it were designed, it's not really a control issue, but rather, you know, I think it would be appropriate that we would set it up and then be able to connect it with the CDC ones and so forth. But I cannot -- all I can say is I can take the recommendation back, and we can start looking at what we can do in the future.

MS. NESARY: Yeah. Well, you know, if in fact the HHIN -- and I talked with Bea this morning about the Web hit stuff -- it seems to me that that is evidence that there is some kind of audience out there that is interested in Hanford issues and possible health effects and wants to track it. And if there is a sizable audience out there, then perhaps the outreach budget that ATSDR does have should be maybe rejiggered a bit to -- I mean, if the pie remains the same size, perhaps the resources ought to be redirected to media where there's more potential audience out there.

MS. CAMPBELL: I can take back that message, and we can work on what we can do, and try to work with you on it, if that is a consensus of the committee.

MS. STEMBRIDGE: So the recommendation before us is a request to ATSDR to explore how to create a Web site for this subcommittee.

MS. NESARY: Yes, so that we can link with other sites, other tribes, other organizations.

MS. CAMPBELL: There's going to be a limit on how much we can do.

MS. NESARY: Yes.

MS. CAMPBELL: Let's just start with the first piece.

MS. NESARY: All right, yeah.

MS. STEMBRIDGE: I mean, if we get the Web site we're a long way down the road.

MS. NESARY: Okay. That's our recommendation.

MS. STEMBRIDGE: Anyone with objections or concerns about this recommendation? Very good, we'll go forward with it.

MS. NESARY: Okay. Let's see. We were also in agreement that we should go ahead and send representatives to the evaluation meeting, or surveillance people, whatever you want to call it. And we also had a long discussion around what might be termed credibility factors. And once again, these had to do with contract and task order procedures and processes within CDC, with the argument that credibility has everything to do with whether or not you can do outreach in the first place. If you don't have credible data, nobody's going to believe you. So if you back through that, make sure the processes and the choices are public and open and credible to everybody, and you can sell your story better.

So within that concern we kind of wrestled with whether or not that -- we urge -- we're not making a recommendation so much as a question or a desire that the committee as a whole not drop the topic of how awards and contracts and task orders are let out, and how that works. So we're just urging that that time on the agenda be set aside for July, and that that be explored thoroughly, and I understand that it is. And so it wasn't a recommendation from us, but we wrestled with whether or not it belonged to this committee or how to handle it. And I think that's about all. Anybody else? What else?

MS. STEMBRIDGE: Did you have discussions about representation balance --

MS. NESARY: Oh, yes, we did. I'm sorry, my mistake here. We did, and there was some discussion, some specific suggestions. Ricardo suggested that he'd like to see an Hispanic scientist on the board, and I think he had in mind some names. And he left after the outreach meeting because he was feeling very poorly, but he did specifically make that suggestion, and I think he may have some names and some ideas for that. I don't know that he's fully apprised of the deadline changes with that, but anyway, that was his suggestion. I've been concerned that we have a historian on the board or more social scientist kind of representation, so that was my idea.

And we did ask for the next outreach meeting -- and I'm going to start following up with that -- is to have the archivist from HHIN maybe meet with us during the Outreach Work Group session in Spokane next time, and maybe have more explicit discussions about how the Web system works there, and also the role of the archives, or potential role in the archives and HHIN to work with our Outreach Work Group, because we'd like to see more direct connections made with that group. So that's not necessarily a recommendation, but an agenda item for our work group for next time. So anybody, please, fill in, add.

MS. STEMBRIDGE: Linda.

MS. KIER: I was just going to add, not to so much reopen the whole idea of a delegate from us to NAS, but in regard to our outreach group, we were concerned, not just with the public outreach, but also so that other groups that are relevant to us, or that we need to understand better or they need to understand what we are about -- it was an argument that might be made for sending a delegate. And I realize the administrative and economic constraints that our federal official works under, and I don't want to make her job harder. But if she does make a pitch, that -- if she does make a pitch for possibly budgeting to have someone sent on a face-to-face basis, not just inserting text into the record, that part of that is, when you're at a meeting, you meet people, they ask you questions, they know what you're about.

They can -- how shall I put it -- a flesh-and-blood representative, because NAS, according to Mr. Simon, is trying to outreach to us in a rare event, to come out to the Pacific Northwest rather than just administrate from afar, that he's actually -- they sent him out here to encourage us to attend, you know, us as HHES and the public, as well, and to have input. And many of us realize that we dropped the ball in not getting our comments organized better and into the Studies Work Group -- what can we say -- but we've got a little bit more time, and I just thought as an outreach idea it had some merit, just so they know what we're about and have someone they can talk to.

So that was the pitch I wanted to have our DFO make, if she's still considering presenting that idea. By the way, we didn't get anybody for public comment last time you asked. There was an older couple sitting here, and they left, if you remember. And they -- the gentleman was not feeling well, and I met his wife. They got kind of lost on the freeway and came back to get directions. And she told me that they were wanting to listen and to make some comments, but he was not hearing well and began to not feel well. So that we did have, in effect, a local couple here -- or local to Hanford, that is, site population to Hanford -- and they were just not feeling well and just couldn't quite make it through to hear and to comment. So I just kind of wanted the group to know that. Ricardo was also ill from the flu, and normally he has a comment, usually about an Hispanic community member who has passed on. And because he had to leave and wasn't feeling well, and I met that couple and they expressed their concern to me, I wanted to have it in the record that we did have people here, but things happened.

MS. STEMBRIDGE: All right. Thanks, Linda.

MS. NESARY: Along that line, we also had a member of the public come into our outreach group, and who came up to the table and talked a bit at the end of the meeting, who said that he -- he was aware of two other groups that were working with radiation health issues. One of them, apparently

the group of people who had been bombers on the bomb test sites in the Pacific in the '50s, and who are now experiencing health effects, latent health effects from that process, and are able to get medical treatment; and then he spoke about a submariners group out of San Diego that are also able to get treatment. And that's what he -- he said that, you know, what he needs is treatment opportunities, not just more studies, but treatment opportunities. And so I thought that should be into the record, as well.

MS. STEMBRIDGE: Anything else from the outreach group?

MS. NESARY: Oh, one more thing. Kate McKinney was the presenter for our Public Health Assessment Outreach Plan and talked with us about that. So anybody else?

MS. STEMBRIDGE: Leslie.

MS. CAMPBELL: If you could just give me some clarification, Marlene, when you said that a recommendation for membership was an historian. What do you mean by historian? We're trying to look at the expertise, and we need to understand. I'm afraid I can't translate that well.

MS. NESARY: Well, I just read the new book out of UW History Department called Atomic West -- Essays on the Atomic West. And that's a group put together by a number of historians who have been working on topics related mostly to Hanford and mostly to DOE sites and their history and their legacy and the players in those arenas. And it's just -- I like that larger context, in terms of understanding what the issues are now and here before us. I think that's a useful -- so an historian of the west, and a historian of the atomic west now. There are some who would call themselves that.

MS. STEMBRIDGE: All right. Anything else? Then we shall move forward and hear from the Public Health Assessment Work Group, the neo-PHAWG, as they are affectionately known. Trisha?

MS. PRITIKIN: Basically what we're doing in that working group is to restructure the four NPL site PHAs which we had been working with into one unified Public Health Assessment, in which we're attempting to address the contaminants by pathways, potential pathways or completed pathways: the air pathway, the water pathway, and the soil pathway. And that's what we're attempting to do. And in order to do that, Rita Ford and Michael Brooks were here for our group. And their team has been rewriting sections of this PHA, and we've been working through the sections one by one. It's a real detailed process. We went through this time the introduction, which is section 2 -- if anybody has their copy of it -- and section 8, which is toxicology. We made it almost all the way through section 8, all the way through section 2.

And just to summarize what we're trying to do, we're trying to make the charts and graphs of contaminants, based upon whichever pathway they pertain to, we're trying to make the charts understandable to the public. We're trying to point out where the potential areas of concern are. If there is an issue of additive effects, synergism or potentiation -- if I have that right -- then we are trying to point out those particular factors as well, in regard to these particular contaminants. It's slow progress, but I feel that the folks we're working with from DHAC are being

very, very responsive, very patient with our comments, and that we're developing a very interesting and, I hope, meaningful PHA. Personally, I feel there are still large sections of this PHA that are not understandable to the public. We're getting to the point where we have to ask ourselves, how do you make some of these complex concepts really understandable? So we're getting to that point.

We would like to ask the plenary to review, if they wish, and submit to DHAC by June 15th any comments you may have on all of the sections of the rewritten PHA, plus the synergy section, which has been rewritten. I don't think anyone has the synergy section yet, except about three of us, and I believe that the synergy section will be mailed out by DHAC to everyone on HHES. Is that -- okay. Please, others who are in this group, if I forget something, let me know.

So half or more -- maybe three fourths of our time was spent on going through the introduction and the toxicology sections, and discussing the fact that we'd like the plenary to supply us with comments on the entire PHA and the synergy. The synergy section is to be mailed out within the next week, and everyone should have the other sections already. If you don't, please let us know.

MS. STEMBRIDGE: Trisha, do you want these comments to come to you or to go to DHAC?

MS. PRITIKIN: I think to Rita Ford at DHAC, or to Michael Brooks. They didn't specify exactly who we should send it to.

MS. WALKER: But it needs to go through them?

MS. PRITIKIN: Yes.

MS. STEMBRIDGE: And is there a time frame associated with getting the comments to her? I'm sorry, I didn't get that.

MS. PRITIKIN: June 15th. Now, the last fourth of our discussion was on the questions that you gave to us to consider on the national evaluation, and on the balance of the membership of HHES. And so I'll move on to that, unless anybody has any questions on where we're at in the PHA process. Or did I forget anything on the PHA process? Okay.

Now, with regard to the national evaluation, a lot has already been said in the other working groups as to what we discussed. But we did have -- we did want to recommend that folks went to this evaluation. I'm personally -- speaking personally, I think we're already in this evaluation, even though we keep saying we're not going to do it. We're in the middle of this evaluation, we're spending time on it, and we're sending representatives. So it might be good to admit that we are a part of that. We did have several issues of import. You asked for issues of importance to take to the evaluation. Two of them were not mentioned yet, so I'll mention those. One was, how do health effects subcommittees -- or how do the other health effects subcommittees that exist deal with dissent? I think that's a really interesting question.

Next, the other question that hasn't been addressed yet, are the constituencies of these health effects subcommittees well informed, and how do these subcommittees evaluate that. Under recommendations to the plenary -- this has probably been mentioned before, but we felt real

strongly about this -- that the process is counterproductive in this evaluation if it takes too much of our time. It's already taking a big chunk of our time in the working groups, just so that we keep that in mind. Then finally, with regard to gaps in representation, our list is quite similar to what other people have brought up, other working groups have brought up: Japanese Americans who were within the Hanford downwind area during emissions years, social scientists, historians, a psychologist or a psychiatrist.

And I'm not saying this because people who feel they are impacted by Hanford need a psychiatrist. I'm saying this because I feel -- well, because we felt that the psychologist or psychiatrist would be very helpful in analyzing the human response to this situation. An economist -- I don't know if this was mentioned before -- and an Idaho exposed person. One final interesting aspect, which wasn't part of our deliberations, but actually occurred when I went to visit the outreach group, was Kate McKinney was there. And she's working -- one of her major foci -- plural of focus -- is upon the media aspect or the outreach aspects of the Public Health Assessment. And I didn't even realize there was going to be a press release on the Public Health Assessment, so I have asked that we coordinate what we're doing with what the outreach is doing on that issue. Have I forgotten anything? Anyone else in the working group want to add anything? Okay. Any questions?

MS. STEMBRIDGE: Judy.

MS. JURJI: I was wondering, Trisha, what the rationale for the economist on a committee like this would be.

MS. PRITIKIN: I'll defer to Marlene to respond to this.

MS. NESARY: It was part of the social science umbrella, shall we say.

MS. JURJI: Oh, as they fit in the social science category?

MS. NESARY: Right. Well, I'm concerned that we understand what the budget process is and the resources are and, you know, follow the money kind of stuff, and that was part of my thinking there.

MS. STEMBRIDGE: Linda?

MS. KIER: I just wanted to add to what Marlene said, that a member who is no longer with us, who wasn't renewed, Greg deBruler, urged us from the very beginning, when we had a different DFO, when we began our first official meeting early in 1994, he urged us to have a work group on budget. And we didn't listen to him, because we were given assurances by our DFO -- who was passing on an assurance, and he was passing on what he had been told. He was not deceiving us, he believed that we did not have to worry about money. All we had to worry about was process and product. And he said, "Don't worry about that, you don't need a budget subcommittee, you don't need to track funding." He said, "You just do your job and the agencies will do their job, because we have a memorandum of understanding."

So that it's not so remote to have somebody or somebodys, or to advise other groups to have somebody or somebodys from the very beginning tracking the whole budget process, because that's really what's held us up here more than anything else, with all of our other troubles. So I just wanted to add to that, that we were warned about this five years ago, and we didn't listen, and now we're sorry.

MS. STEMBRIDGE: Anything else from the Public Health Assessment folks? I just want to make one comment, because it resonated with me, about the amount of time the national evaluation has wormed its way into our agenda. And I am very reluctant to add additional things to work group agendas, because it is just a source of never-ending amazement to me how much work this group of people does in that small amount of time, and I'm very keenly aware of what an imposition that is.

And I just wanted to make clear that if, in fact, our scouting troop comes back and says, "I think we're going to have to roll up our sleeves and play ball on that," I think we're going to have an ad hoc committee of people who will work on this, because it is not a burden that I think we can afford or should distribute among our existing work groups. So once we decide emphatically that we are going to play ball, then we're going to have to come up with some kind of structure so it does not somehow slop over and cover up all of the work that we are doing. Judy?

MS. JURJI: I'm very glad you said that, because after I had given my report, and I had to rush it because it was right before lunch, several members of the study group came up and reminded me that -- you know, that one of the issues about the evaluation was exactly that. The biggest issue, above all, is the scale of the thing, you know, how much time it's going to take. So they just wanted to be sure that we sacrificial lambs that will be going back there will really make sure that's heard. And yes, I want to assure everybody it will.

MS. STEMBRIDGE: Darrell?

DR. FISHER: Yeah. I would just like to echo the comments of Trisha and others on the process and the time that it takes. But even going a little more deeply with it, I was concerned that this evaluation was so poorly designed that the objectives weren't clear, the criteria were not specified. I mean, it was a very obtuse thing to deal with. And I think that's -- it would be more -- it would be easier to deal with, if it were a process that could be defined a little bit better.

MS. STEMBRIDGE: We are going to come back and have some more conversation about the evaluation and what our scouting team is going out armed with. I also think that, even if they come back from Atlanta and miraculously the process is clarified and all of our questions are answered, there still remains the issue of -- for me, personally -- having to continually face the fact that there is no funding for the subregistry, there is no funding for medical monitoring, and yet this exercise, which -- this may be a slightly harsh term -- but is essentially navel-gazing -- I mean, we're not helping anyone. This is not a study. This is not a public health activity. Somehow we do find the time and money to do this. And that's a discussion, a part of this decision that I think we're going to have to be very frank and honest about, as well, when we decide if we want to participate in this. Linda?

MS. KIER: I'd just like to add, you know, that I think it's really even worse than navel-gazing, because the feeling I got from the conference call, particularly Owen ^ Divine's remarks, was that really we're being put through this to justify not ourselves to our communities that we're trying to report back to, or the scientific studies we're trying to advise on and get a handle on and interpret or make better or whatever. What we're really doing is somehow justifying CDC's budget as it trickles down through NIOSH, NCEH, ATSDR, whoever, because I know each site has different lead agencies, or may have a different lead agency. Somehow CDC is trying to justify their activities, as if -- as if we were responsible for the fact that maybe the FACA committees are somehow not giving the government enough bang for the buck. And as we've reiterated over and over again, we're not the blockage. Give us the buck, we'll give you the bang. We've got a product. And somehow this is being obscured, as if it was a process question that we had to justify to the larger agencies above us.

MS. STEMBRIDGE: All right. I think there's a very good chance we're going to get out of here early, folks, because we are ahead of schedule. And I'm just going to plow right ahead. The agenda item that we had scheduled for after public comment and the break was a discussion about balance of representation. What I heard, and from my notes, is that we had, by and large, not just continuity across the work groups, but a reiteration of many of the -- of this same conversation that we had a year ago: that we were looking for a social scientist, that we were hopeful of adding a toxicologist, a Japanese American, a representative from Idaho. They weren't in the pool to choose from last time.

And so this list that I have looks very similar to what we had last year. And it doesn't look to me, based on my notes, that there are any -- much in the way of differences to even discuss about. This looks to be a fairly cohesive consensus wish list to forward to the agencies. So I want to check and make sure, to see if anyone has any additional comments that they want to express, but I think we've got the list about as good as we're going to get it. Judy?

MS. JURJI: I just wanted to be sure that labor was still in there. I guess that was part of the old pool, right, wasn't it?

MS. STEMBRIDGE: I track these as in things to keep, representation to keep, representation to add, and Labor was very strongly in the keep that representation.

MS. NESARY: I wanted to add that, to my sadness, Buck announced that he's leaving the committee at the end of the year, and he was talking about that in the work group, Outreach Work Group as well, how do we replace labor representation on the committee. And I heard him out on his cell phone at noon working on that.

MS. STEMBRIDGE: A gold star for Buck. All right. And I also heard -- moving on -- a great deal of consensus about the national evaluation. I heard that at least this scouting party -- or sacrificial lambs, as I've heard them called -- should brave the trip to Atlanta. I heard some delineation of issues. And I know that Buck has been putting -- has worked up what he has as a short mandate, and he wants to present that to all of us and make sure that we're on the same wavelength, and then we'll just send them bravely forth to do their thing. Buck.

MR. CAMERON: In the role of sacrificial lamb, all I can say is "bah." Please don't put that in the minutes. We do want to go knowing that what we are going to say and the positions we're going to take do reflect the committee's position. And I think, even though this committee disagrees on many things, I've heard near uniform consensus on this evaluation. And I hope I've captured the sense in words, however rough these may be. What we want to tell the folks there is that the HHES agrees that the health effects subcommittee process should be evaluated, but that the appropriate focus, scale, and methods of evaluation may differ from committee to committee; a polite way of saying, we don't like your methods. The evaluations must include all of the participating stakeholders, including the agencies and other stakeholders, and must focus primarily on outcomes, including agency actions taken based on HES recommendations.

We believe that evaluation should not be initiated until there are clear statements of the identity of the sponsors of this evaluation; two, the purpose and proposed uses of the evaluation; three, the criteria against which the committee will be evaluated; four, the metrics or measurements that will be used in the evaluation; five, resources available to conduct the evaluation; and six, the time frame and intensity of the evaluation. Have I stated it accurately?

MS. NESARY: Yes.

MS. WALKER: Yes.

MS. STEMBRIDGE: Trisha.

MS. PRITIKIN: The only point, Buck -- you may have stated this, so if you did, I apologize. But I wanted to make sure that the point we had brought up before, the implications of not participating the evaluation to funding of this committee -- I mean, any kind of hidden implications of not participating is addressed, too.

MS. STEMBRIDGE: I think it is important to get on record, if we choose to participate, will there be any ramifications, and get someone on record to the extent that they're able.

MR. CAMERON: Thank you.

MS. STEMBRIDGE: I just have two additional things. One was a specific mention, along with the agencies, of including the tribes. And the other, this may just reflect my own personal lack of knowledge about evaluation, but somehow to capture the point that we want to evaluate not just process and outcome successes, but clearly identify failures, things that we tried that didn't work, things that we wanted to try and couldn't, on all sides of the table.

MR. CAMERON: And that should be inherent in any well-conducted assessment.

MS. JURJI: Right.

MS. NESARY: That's right.

MS. STEMBRIDGE: I would hope. Anything else? Trisha.

MS. PRITIKIN: It's me again. I don't know how to phrase this, but I want to figure out whether citizen participation on health effects subcommittees is token or real; that is, whether our input is really valued and really helps to forward the agendas and priorities of these agencies, or whether -- whether we're here because they need public involvement, and here we sit at a table. I don't know how to phrase that or how to get a feeling for it, but -- and I hope you understand the point I'm trying to make.

MR. CAMERON: And Trisha, that's what I've tried to say in focusing primarily on outcomes. I mean, if there has been a process and we all sit here happy, and it doesn't impact -- our recommendations don't impact the outcome, and if that is not demonstrable in the agency records and changes, then we are wasting our time here. And, in fact, we're worse than wasting our time. We are demonstrating that there's citizen input that doesn't exist.

MS. PRITIKIN: Yeah, or isn't counted in the process.

MS. WALKER: Not valued.

MS. PRITIKIN: Right.

MS. KIER: Or, just to add to that, worse than that, we are actually legitimizing that through our participation, not just, you know, filling up column inches and fluff on a CDC report, but actually legitimizing a deceitful process, if the worst be so, as Trisha and Buck have stated.

MS. STEMBRIDGE: Leslie.

MS. CAMPBELL: Late breaking news here: I had a phone call this morning from someone at the CDC who will be involved in this workshop. It is not anyone that you have met to this point, I don't think, Buck, but rather someone who is on the CDC evaluation group. He's not a part of the NCEH or NIOSH or ATSDR, but he is being brought in kind of as the outside facilitator with an evaluation background. We had a long talk this morning about what his expectations were for this workshop. And I felt that he was going in with very much an open mind and an objective spirit on pulling together what this will be and, you know, getting input from all of the four groups to do that.

And when I say four groups, I'm referring not to the agencies, but to the subcommittees, but also agency representation that will be there also. He understood the need to define what kind of an evaluation and the criteria and such, some of the very comments that you have been bringing up the last couple of days. And I just felt that I needed to share that with you, to let you know that I think there is a lot of thought going into this from others, beyond the little core group that's been working on it, and I think that'll help the process when you have that meeting.

MR. CAMERON: Who is this individual?

MS. CAMPBELL: His name is Bobby Millstien, Millstein. I'm not sure.

MR. CAMERON: He is involved in the process.

MS. CAMPBELL: I got the opinion, from the way he was talking -- I know he's not with NCEH -- that he had not been involved with it. And I don't know who else they're going to have there from outside the core group, but anyway --

MR. CAMERON: Okay. Thank you.

MS. STEMBRIDGE: Judy.

MS. JURJI: I remember there was a lot of discussion -- I can't remember if it was the work group or the plenary -- where we were talking about ways to participate in an evaluation on a partial basis, either just sort of picking and choosing those aspects that we feel are useful to us and those that aren't. And so I think I'm hoping that, when we go back, we can kind of see if that's a possibility. The other thing that I was wondering whether -- if there's a way to ask the agencies if there's -- I know that we can't get funding for a separate evaluation.

But if there was a way to just do some very quick streamlined questionnaires, what's been successful, what's been failure and, you know, could we do something like that? I mean, that wouldn't require additional funding. It would probably just be half a day's work or less. Maybe you've thought about it, or send home a questionnaire with everybody on the committee, and that would be that. There may be little streamlined ways we can participate without the big, huge event.

MS. STEMBRIDGE: Well, I'm hopeful that, once they define what the "it" is they're going to do, that then the discussion of how "it" might be accomplished in other ways can go forward. But until the big "it" has some definition, it's going to be next to impossible to figure out other ways to do that "it." Anything else about the national evaluation? All right. Well, that is a good segue into agenda items for our July meeting, which I have noted that I think we're going to need a fairly significant block of plenary time to hear a report back from the scouting troop, their report about this meeting in Atlanta, time to ask questions, and then some discussion about what the next steps might be.

The other special -- if you will -- items that I have down for the July agenda is Owen Hoffman and his presentation on cumulative dose calculations, and the task order/RFP discussion and question and answer. This is in addition to all the usual work group times, agency updates, et cetera, et cetera. Anything that I might -- that I have neglected to write down on this list that came up? Beverly.

MS. WALKER: The June 19th meeting, a report from that meeting?

MS. STEMBRIDGE: Oh, okay. Do folks want to have that in plenary or have that in a studies group?

DR. CEMBER: Plenary.

MS. WALKER: I think plenary.

MS. CAMPBELL: From who?

MS. STEMBRIDGE: From I guess whoever is funded to go or happens to be there, and wants to give us an update on it. Anything else? Glyn.

DR. CALDWELL: What's the dates of that meeting, for the next meeting?

MS. STEMBRIDGE: It is July -- the Tribal Council meets on Wednesday, July 21st. We will be meeting on Thursday and Friday, July 22nd and 23rd, and that meeting is in Spokane at the DoubleTree downtown.

MS. HAARS: Where is that DoubleTree downtown?

MS. STEMBRIDGE: It used to be the Red Lion. It is just east of the opera house and convention center, right on the river. It is right on the Centennial Trail. We also, I understand, because the cultural sensitivity training was not able to be held on Wednesday, we need to reschedule that. And I don't know, do you folks want to try and do that the Wednesday evening of the next meeting, or hold that until the next time we're at a tribal location? What's your pleasure on that? It's hard, without Jo Marie here, to know if that's doable. Beverly and then Glyn.

MS. WALKER: She said that either July or November, and she was debating on whether she wanted to try it in July, but she thought maybe November.

MS. CAMPBELL: Well, if we have it in November, the Tri-Cities will be close for the presenters.

MS. STEMBRIDGE: It certainly would be. Glyn.

DR. CALDWELL: I was going to ask, more than anything else, is it feasible to do it away from tribal land. I wasn't sure what the components were. That's all.

MS. STEMBRIDGE: Well, maybe what we can do is just task Leslie, if she would be so kind, with talking to Jo Marie and deciding what would be the easiest and most advantageous to Jo Marie, and make the decision on that. And if it's July, we'll schedule it for Wednesday evening, and you all will be notified well in advance of that. Linda?

MS. KIER: I have a question. I know we're sort of done with membership and we're on agenda now. Refresh my memory, please. Were we also looking for nominations for contractor oversight, if we get funding? There was something else we were asked for solicitations for. Was it medical monitoring contract oversight or something?

MS. STEMBRIDGE: It has been at least a meeting or so ago, and Greg Thomas isn't here to speak to that, but I know that there will be some additional boards specific to medical monitoring. And I suspect that, like everything else about medical monitoring, it's just on hold awaiting the funding.

MS. KIER: So we'll get notification for those nominations at some point, if everything goes through?

MS. STEMBRIDGE: I would -- yes, that's my understanding.

MS. KIER: One deadline we don't have to worry about right now?

MS. STEMBRIDGE: Yes, that is true. All right. By my notes, we have accomplished everything on the agenda. I want to check just one last time and see if there is anyone from the public who would like to offer comment. I don't know that we're exactly overrun with members of the public. If not, and there are no other comments, I believe we are adjourned until July.

(Meeting adjourned.)