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convenes the

SEVENTEENTH MEETING

ADVISORY BOARD ON RADIATION AND WORKER HEALTH

VOLUME II

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TRANSCRIPT LEGEND

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PROCEEDINGS

REGISTRATION AND WELCOME

(8:30 a.m.)

DR. ZIEMER: Good morning, everyone. We're going to reconvene at this time. Let me begin with a couple of announcements and reminders.

Remind everyone who's here today to please register your attendance in the notebook near the entryway. Also members of the public who wish to make public comment later in the meeting, please so indicate at the sign-up sheet there at the table, as well.

I would also again remind everyone that there are copies of various handouts that are being used today, as well as other documents that may be of interest to you, on the table on my -- sort of in the rear to my left side -- or the left side of the room as you face the screen.

We have made an adjustment in the agenda for this morning. Dr. Melius is not going to present a report this morning, so we have moved Dr. Toohey's report up so that we're going to begin with the report on the ORAU contract support status. Dr. Toohey's going to present that

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report and then we'll be back onto the presentation by Dr. Till.

So let's begin then with Dr. Richard Toohey from ORAU.

ORAU CONTRACT SUPPORT STATUS

DR. TOOHEY: Okay, are we on? Can you hear me? Better? Okay, great. Thank you.

All right. Good morning. I'll go through my presentation and try to answer all the questions you asked Dave Sundin yesterday. As you know, we're just about coming up on one year of the ORAU team contract with NIOSH for dose reconstruction support. And to refresh your memory, our contract -- or our effort, I should say, is organized into six different tasks.

Task one is database management, the computer operations.

Task two is data collection for claims and petitions. That's all been related to claims so far. They receive the DOE submittals of individual monitoring data, scan that in. Any data that is captured to field trips to records repositories and that, that group also scans in. We also have a number of health physicists in that group who review claimant files, make a

determination if they are in fact ready for dose reconstruction, looking for things like gaps in monitoring data. We also have some QA people review files looking at the Department of Labor-supplied information to see if there are any problems with that data that might hold things up.

Task three is dose reconstruction research.

That's headed by Judson Kenoyer with Dade Moeller & Associates. Judson's here today. And their primary effort right now is developing the technical basis documents or the site profiles, whatever you want to call them. And I'll talk a little more about that effort, but the primary presentation on that will be by Dr. Neton later this morning.

We made a little change recently. You may recall task four last time I showed this slide was simply called CATI, Computer-Assisted
Telephone Interviews, with the claimants. We have moved some other operations into that same task and we now call it Claimant Contact. And the things we moved in there were the dose reconstruction assignment letters, the close-out interviews with the claimant. Also mailing out

the dose reconstructions and the OCAS-1 forms which we're taking over from NIOSH and things like that, and the 800 number operation we've also moved into that task. So we've just consolidated all the claimant contact into one group. We have neither added nor deleted anything we were doing. We just took those last things I mentioned out of task five, dose reconstruction; put them where they made more sense and also we're having them done by people who have better people skills than your average health physicist.

Task five of course is the main operation, the dose reconstruction generation itself.

And then task six, the technical and program management support.

So how many folks have we got working on this thing now? We've got -- these are full-time equivalents. There's actually more people than that. We have a number of part time people, especially in task two, doing the claim review. Some are ORAU employees in our Colorado office, and some are working on the beryllium project and they had some time available and so we adopted them, working on that. So we've got 29 FTEs on

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The big one is 102 on task three. And again, Dr. Neton'll talk about that. We front-end loaded this because we made the decision generating these technical basis documents is really the first thing we need to do, and the light finally went on that it was going to take us an awful long time to do this with our own resources. So we decided to subcontract a lot of it out, and we have now assembled I think 13 TBD, technical basis document, teams, most of which are subcontractor operations. And again, Dr. Neton will show you that in detail, but it's basically -- we've taken these subcontractors, some of whom we had worked with before, some of whom had been partnered with the SAIC Battelle proposal -- I mean there aren't that many health physics companies out there. But just giving a given company the task to produce the technical basis document for a given site.

Of course we have our own people overseeing the task and working with them. We've also involved OCAS staff early on in this process to help expedite the eventual review process. If we're heading down the wrong road early on, then

there's no sense wasting a lot of time and effort and not finding that out until it goes in for final review.

And if a contractor -- or subcontractor, I should say, does a good job on a document, they'll get another one. If they don't, well, thank you for your services and don't call us, we'll call you. So we think it's an efficient way to get this done, front-end load, and I would expect a year from now that number of 102 will be probably down to around 30 or so.

Task four on the -- well, this still shows CATI, but it's all the claimant contact, is now 21 FTEs.

The majority of people in the health physicists are the 98 folks actually doing dose reconstruction. And then 18 on management support, so it's a total of 285 FTEs, but it's about 320 warm bodies or so when you could the part-timers.

Okay. The facilities and equipment. We've set up our Cincinnati Operations Center out in Norwood, was five minutes away from the NIOSH location until they moved last month, but now it's only about 15 minutes away. We've got -- I

went metric on this -- 1,400 square meters. And we also set up a separate telephone interview facility that's about a block away from that. Some of you did visit our facility some months ago for the training effort for some of you, I think the working group for the Board oversight contractor has seen that.

We've got a computer network set up -actually it's more than 300 users now, but they
are spread all over the country. And of course
the big thing we've had on that is security
protection, so we've been very careful with antiviral software and firewalls and all that sort of
thing. And I am pleased to report to you that so
far we have not had any viruses or worms getting
into our system.

And we've also established telecommunications and data transfer. We have a high-speed link to NIOSH for data transfer back and forth. And we also have a link to the Dade Moeller office in Richland. They're doing a lot of the up front data entry, inputting say monitoring records for an individual worker into a spreadsheet from whence they can then be copied and plugged into the IREP spreadsheet, and it just expedites the

actual physical production of the dose reconstruction report. We're increasing the band width on that, the -- we were thinking of putting in a dedicated T-1 line out there but we found out Dade Moeller & Associates, their internet service provider can give them up to a megabyte band width, so they're just going to expand that, so that'll come in pretty quickly.

All right. Now, the thing everybody's interested in, the performance plan or the production plan. As you heard yesterday from Pete Turcic, we were -- we were originally hoping to do about 6,000 this year. And generally that's not going to happen. Our current best estimate, what we really think we can produce, is about 4,000.

As of last week we have completed and turned in to NIOSH -- let me make sure I have the right number here -- 850 dose reconstruction reports.

Many of -- the vast majority of those have been from Bethlehem Steel and Savannah River, but not exclusively, and I'll talk a little bit more about how we're doing those. We've been averaging 75 a week for about the last month.

We're ramping that up to -- oh, 100 to 125 a

week. Next month, in September, we plan to be doing 150 and in October get to about 200 a week and just hold it there.

Now, the question came up yesterday about clearing the backlog and how long that's going to take. And the answer to that depends on your definition of clearing the backlog. The first definition is working through the 13,000 or so claims that are already in the hopper. And at a production rate of about 200 a week, we will estimate we will be through those in November, 2004.

The operational definition of clearing the backlog, which Larry Elliott and his staff have put as a goal, is to have no claims in the hopper that are over one year old. So I had to apply a little calculus to work this out, and on the assumption that we do 200 a week, but 100 new ones come in a week, we get to the no claims over one year old in April of 2005. At that point we'll work through and then in the fall of 2005 we think the average age of a claim will be about 90 days. And we estimated if input continues, new claims coming in at about 100 a week, we will always have about a 90-day supply on hand, or

about 1,200 to 1,500 claims in the hopper.

So our -- we should have actually a little bit over 4,000 done this year. Right now we're about a week behind. We got into a little more detailed discussion with NIOSH on a revision to the Savannah River document that was looking at some aspects of internal dosimetry, but we got their comment back last week. Our replies to the comments are going back to NIOSH tomorrow. We don't see any show-stoppers there, so we fully expect to be able to process the rest of the Savannah River claims.

Let me go on and discuss the sites we're heading. As Dave -- or the sites we're aiming at. As Dave Sundin mentioned yesterday, we've decided to approach this in what we think is a way that would do the most good for the most number of people in the least amount of time, and that is essentially batch processing. And once a -- the site profile has been completed, the technical basis document has been done, we're just going to try to do all the claims -- or as many as can be done -- from that site. And the order in which we decided to attack the sites was simply on the order of how many claims are from

the site. Savannah River and Y-12 normally run neck and neck. One month Savannah River will have more, the next month Y-12 will have more. But in point of fact, there -- only about half of the claims that show Y-12 as a work site, the workers worked only at Y-12. About half of them also worked at X-10 or K-25, and especially for the trades because they would cover all three Many people who were assigned and had offices at X-10, for example, actually had their labs at Y-12 and so on and so forth. So we are going ahead with Y-12 as an early on. But you'll notice Oak Ridge National Lab and the Oak Ridge gaseous diffusion plant are right there and we hope to get all three of those done at the same time.

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The next major site we plan to have the document done for is Hanford. The external dosimetry and X-ray portions of that document have been completed and we expect the rest of it to be done and in for NIOSH review by the end of this month.

We're also working on the Iowa ordinance plant or the Iowa Army ammunition plant, depending on which reference you look at. It's

scheduled to be done by the end of this month.

That may slip a week or two, but in point of fact, we really can't process those claims until the dosimetry data has been made available from Defense Department. And we, together with NIOSH, are actively pursuing capturing those records.

So then later on this fall, we will be finishing up Rocky Flats and Los Alamos. Also will get the technical basis documents done this year for Idaho and a few other sites, but we won't actually be processing claims this year.

I think Jim Neton may have mentioned yesterday, once we've got the site profile done and approved and everybody's happy with it, there's about a one-month lag time before we can actually start doing claims from that site. A couple of things come into play there. One is the dose reconstructor assignment letter, and we give the claimant two weeks to offer any objection they may have to the assigned dose reconstructor. So far, out of over 1,200 assignments, we've only had two claimants raise an issue about that.

The second thing of course is the telephone interview, and that needs to be scheduled, and

then also the claimant gets two weeks to turn around the draft telephone interview report that gets sent out. So there's some built-in lag time in there.

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The second thing is it also takes us about a month to put some of the data in the site profile into spreadsheets which then serve as templates for the dose reconstruction. And we do go over those spreadsheets with NIOSH and there's a verification and validation procedure to make sure the thing -- they are actually doing the dose calculation that we think they are doing. But then that's an efficiency measure. With the monitoring data entered up front and the spreadsheet, the dose reconstructor has to put in some of the personal specific information. Much of it gets downloaded automatically from NIOSH's NOCTS database. And there's relatively few things in terms of data entry the health physicist has to do. About the only thing they still have to do by hand is enter some of the bioassay data into the IMBA program to do the internal dose calculation. So we've attempted to streamline that as much as possible, but it does take about a month to generate those spreadsheets

and get them debugged and distributed, make sure they're working.

On the AWE sites, of course Bethlehem Steel was the first one we've gotten in, and we're currently developing what we'll call Bethlehem Steel clones, other rolling mills that also rolled those billets down. Let's see, that's Bridgeport Brass -- I'm drawing a blank on the other ones, there's two or three -- Simonds Saw and Steel, thank you. That's one of the other ones.

The Blockson Chemical document was in. We're on our second round of comments and review on that. There's only -- there was one sticking point on that, which we've resolved with NIOSH on mutual agreement, which was dose rate from a barrel of yellow cake. And we've actually found some survey -- barrel survey data from Fernald on uranium tetrafluoride, which is probably a little bit higher than you get from yellow cake, but it would certainly be claimant favorable to use that. And then there are the Blockson clones, the other phosphate processing plants that will follow from that.

The Huntington Pilot plant, that one -- they

recovered -- was primarily to recover nickel and -- that had been contaminated with uranium.

We've got a draft of that in for NIOSH review.

The one sticking point on that we're still trying to figure out is what was the efficiency of the nickel recovery process, because what that tells us is how much uranium by mass was left in the slag or the by-product. If it was very high efficiency recovery, then the by-product could be fairly high uranium concentration. On the other hand, if it was a low efficiency, then there probably won't be much difference in that. So that's something we have to try to chase down.

And also, as you heard yesterday, we have a draft document on the Mallinckrodt Chemical Works which is currently undergoing internal review by the ORAU team and we hope to get that to NIOSH for their review in another week or two. So that's basically the plan on these things.

I should also mention that once we've got the site profile done and approved, we do try to process claims from the site roughly in the order in which they were received. But the total processing time for a given site's probably only going to cover a few months, so that's not going

to be a very big deal.

Let me also mention that we have what we call supplemental dose reconstruction teams. We have one assembled so far, which consists of four senior health physicists, two external dosimetrists and two internal dosimetrists. And their assignment is start a claim, one, and start going through and just work them through so that people who have been in the queue for a long time aren't totally neglected, waiting until we finally get around to finishing their site profile, so they're doing a number of items.

There are also some claims from other sites we are doing under some efficiency protocols, and let me talk about those next.

The first one is for potentially compensable cases. And this would be workers at the primarily Department of Energy facilities whose records show positive bioassay results for inhalation exposure to actinides or the transuranics. So it would be uranium, plutonium, americium, neptunium, curium, etcetrium*. Okay? And they have either lung cancer or a cancer of what we call a metabolic organ -- of course all organs are metabolic, but in this context, it

means an organ which does tend to concentrate or serve as a reservoir for that radionuclide. So for uranium it would be kidney, primarily. For the transuranics it's skeleton and liver.

So we will take their bioassay data, just do an internal dose assessment using the IMBA program, and if the probability of causation from that is -- should be equal to or greater than 50 percent at the 99 percent confidence interval, the case is likely compensable and we're finished with the dose reconstruction. We're currently processing Y-12 cases and there are probably about 100 of those to date, and we've also done some from Hanford, Rocky, Idaho and some of the other sites. So that's going on and continuing.

So -- in fact, here's one example of that protocol. Case was a Hanford engineer diagnosed with lung cancer. His bioassay record had ten positive plutonium urinalysis results in it -- by positive we mean exceeding the MDA. The records and an incident report showed a confirmed intake of plutonium nitrate, so we took the bioassay data, just ran IMBA. Took it back to that date of the incident that was in the records and the intake that came out from IMBA was 520

nanocuries, which is actually an awful lot of plutonium. But the lung dose equivalent calculated from that, from the time of intake to the date of diagnosis, was a total of 88 rem, which produced a probability of causation of 66 percent at the 99 percent confidence interval. Case is finished.

The other efficiency protocols we're developing are at the other end of the spectrum, and that is a claim that is probably or potentially non-compensable. So the criteria for those cases are low exposure potential, a job that in general did not involve hands-on work with uncapsulated* radionuclides or working in radiation areas, like a reactor operator you would not do this way.

The exposure records show either zero or fairly small internal and external doses, and the cancer occurs in what we call a non-metabolic organ, meaning an organ that does not concentrate the radionuclides to which the claimant was exposed. And prostate is our classic example of that, but it's not the only one.

So we tried this at Savannah River and for the internal dose side of it we looked through

their records and incident reports and everything on the site, and we dug out what were the maximum intakes ever reported for all the workers at the site of specific radionuclides. And we took the top five of those and averaged them. Some of them there were not five intakes, so we just used what we had, and we assign that intake to the first day of employment. Okay? Then for tritium we assigned the maximum missed dose they could get, we assigned the maximum missed external dose, which is -- and the number of monitoring intervals times the limit of detection, LOD, of the badge. We also assigned the maximum medical X-ray and environmental doses. So this is in fact a maximum dose estimate.

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So for Savannah River we wrote this up in ORAU technical information bulletin number one, and I think that is posted and on the OCAS web page, was approved last month, and there's just a laundry list of radionuclides that are included in this.

For particle size and clearance type or solubility, we made the claimant-favorable assumptions, picking the ones that would produce the maximum dose to those organs. And the other

thing that to qualify for this procedure, if the case was in fact monitored for internal exposure, all the bioassay results must be below the predicted bioassay results from this maximum intake. So just assigning those -- all these intakes to day one, we can calculate from IMBA what should be in urine or whole body counting as a function of time since exposure, and that's all generated in the spreadsheet for one to 10,000 days post-exposure. And then what the dose reconstructor has to do is look at the actual monitoring data and make sure it always falls below that as a function of time post-intake. Orthat the predicted results always exceeds the MDA, minimum detectable activity, of the bioassay method.

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So as an example of that one for a Savannah River claim was a claimant with male breast cancer. The monitored external dose was a tenth of a rem deep and .45 shallow. The missed dose, which was the number of monitoring intervals times the limit of detection, was .29 rem. The maximum ambient environmental dose could have gotten on the site was 2.2 rem. The maximum X-ray dose from the annual X-rays was a tenth of a

rem. The maximum internal doses, the maximum missed dose from tritium was about a half a rem, and the maximum dose from the assigned maximum potential intake was .82. So adding all those up, the -- was about four and a half rem, producing a probability of causation of only eight percent at the 99 percent confidence interval. So we deemed this case to be complete at this point and -- having assigned a maximum dose and still it's very far from being compensable. As an efficiency procedure, we would stop dose reconstruction at that point.

So the next thing to do is extend this efficiency procedure complex-wide and developing a maximum intake scenario complex-wide. And I've been doing some literature searches on that, reviewing the REACTS -- Radiation Emergency Assistance Center Training Site -- records for accidents. Also the DTPA registry for transuranic intakes who were treated with DTPA, a chelating agent that removes those from the body, and other data sources to come up with maximum intakes for these.

For the external dose, for most sites and most dosimeters, most doses are going to be very

comparable to those for Savannah River 'cause all the major DOE sites used very similar types of dosimeters, so we're currently working on this. And of course we'll submit it to NIOSH for review and approval. And then that opens up a lot of cases or claims that can be processed, even without the full technical basis document being completed for that site.

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We also want to extend this to the Atomic Weapon Employer sites where it's primarily uranium exposure. And what we decided to do there is assign a maximum intake at the beginning of exposure that would be high enough to cause acute kidney failure from chemical toxicity of And under the -- if you look in the old uranium. Good Practice Guide for uranium facilities, it's listed as about 300 milligrams of soluble uranium. But that was based on the ICRP-30 long model and the older biokinetic models. use the new lung model, the ICRP-66 version and the ICRP publication 78 metabolic models, it actually comes out to be about 2,000 milligram or a 2-gram intake of soluble uranium.

And just as an example, the resulting dose from that for 50 years to the prostate gland is

only one and a half rem.

So the external dose for a uranium facility would be, depending on what the facility did, either direct contact with a uranium slab, which is about -- well, roughly 250 millirem an hour shallow dose and about 10 millirem an hour deep dose, or from uranium-containing barrels, and for full-time exposure.

Now actually when I put this slide together, I said whichever's higher. That's not correct. I should say whichever is appropriate, depending on what the site did. So for the rolling mills who were working with uranium billets, it would be from the contact dose with a uranium billet or slab. For places like Blockson that were actually processing uranium ores or things, it would be from the barrel of uranium-containing material.

One thing we said we can't do this for is for skin cancers. Not that they're metabolic, but there's always a potential for a higher shallow dose from uranium that has gone through a melting process 'cause that brings the protactinium 234-M daughter to the surface and it increases the beta dose. Now we know from operations at Fernald,

that was normally cut off of the billet before it 1 2 was sent out. But still, just to be claimantfavorable, make sure we haven't under-estimated a 3 4 potential dose, we're not going to use this for 5 skin or for the other two organs for which the skin dose calculation becomes a surrogate in the 6 7 dose calculation procedure, which includes female breast and testicular cancers. 8 9 Okay. So that's it. So that's a brief 10 synopsis of where we are and where we're going. 11 DR. ZIEMER: Thank you very much, Richard. 12 Let's open the floor for some questions here.

Okay, Jim Melius.

DR. MELIUS: Yeah, I've got a few questions. For the -- I think you referred to it as the supplemental teams, you have two of them, and --

DR. TOOHEY: Well, no, I have one team now. We're hoping to establish two more, but we're running out of dosimetrists out there who need a job.

DR. MELIUS: Okay. Well --

DR. TOOHEY: We're competing with NIOSH to hire the same people. I stole one from them, they stole one from me, so we're even.

DR. MELIUS: Okay. What is the -- assume

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1	that's this program's just started?
2	DR. TOOHEY: Within the last couple of
3	months.
4	DR. MELIUS: Okay. Do we have any idea on
5	what the productivity of that group will be?
6	DR. TOOHEY: They do about one or two a week.
7	DR. MELIUS: Okay.
8	DR. TOOHEY: Simply because without the
9	technical basis document, they have to go do all
10	the records research independently. It hasn't
11	been done and digested for them, so it's not a
12	high volume.
13	DR. MELIUS: Okay. And second question I
14	have is to finish you was the efficiency
15	protocol the first one I believe it was, which
16	was
17	DR. TOOHEY: About likely compensable?
18	DR. MELIUS: Right. What happens to people
19	that don't fall that don't pass that, they go
20	back into the queue?
21	DR. TOOHEY: They go back into the regular
22	dose reconstruction pool.
23	DR. MELIUS: Okay, I was just curious on how
24	that worked.
25	Finally at the last meeting I brought up the

1 issue of posting the conflict of interest... 2 DR. TOOHEY: Yeah. DR. MELIUS: Where does that stand --3 4 DR. TOOHEY: Every --5 DR. MELIUS: -- in terms of that being done, 6 and then secondly, what about for all these other 7 subcontractors and so forth, all this new 8 personnel you've added? 9 DR. TOOHEY: If I may coin a phrase, to the best of my knowledge and belief, the bio sketches 10 11 and conflict of interest statements for everybody 12 involved in performing, reviewing or supervising 13 dose reconstructions and other key people -- you know, the task managers, the team leaders -- are 14 15 posted on our web page. DR. MELIUS: Okay. 16 17 DR. TOOHEY: Now as for everybody involved in 18 the project, we do not contemplate doing that. 19 Okay. What about for the -- all DR. MELIUS: 20 these subcontractors? I don't remember who are 21 key people or what the definitions were, so... 22 DR. TOOHEY: All right. Again, we hadn't 23 contemplated doing that. 24 DR. MELIUS: Had or had not? 25 DR. TOOHEY: Had not.

2 DR. TOOHEY: Because they're not directly involved in dose reconstruction, which was the 3 4 essence of the conflict of interest requirement. 5 DR. MELIUS: Yeah, but don't you think that 6 -- seems to me that I -- we haven't heard the 7 full process. I guess Jim Neton's going to be talking about it later, but it seems to me, from 8 9 the way you're describing it, that they -they're certainly very influential in doing dose 10 11 reconstructions, if not doing them directly. 12 DR. TOOHEY: Well, the data they produce 13 certainly is influential. But don't forget, it goes through two independent reviews and -- one 14 15 internally by the ORAU team and externally by 16 NIOSH for approval. 17 DR. MELIUS: Uh-huh. DR. TOOHEY: And we think that's an adequate 18 way of -- what's that word -- vetting that data 19 20 or what they come up with. 21 DR. MELIUS: So you're thinking that it -- I 22 still -- I guess -- my question would still be 23 why not make that information available so that 24 people would know? 25 DR. TOOHEY: But we did not propose that in

DR. MELIUS: Why not? Is there a reason?

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2 why we're not doing it. But --DR. MELIUS: You'd have no objection to --3 4 DR. TOOHEY: -- like everything else, it can 5 change. Well, like everything else, it'll take 6 time and cost money, but... 7 DR. MELIUS: NIOSH have any response on that 8 or -- Larry, or do we want to talk about it later 9 when Jim's presenting? 10 DR. ZIEMER: Larry? 11 MR. ELLIOTT: No, I have no response on that. 12 We'll take it under consideration -- take your 13 comment under consideration. We are very adamant that all of the dose reconstructors have their 14 15 bio sketches up on the web site. I'm not sure 16 that we see the need to go farther than that in 17 this case, so we'll take your comment under consideration. 18 19 DR. MELIUS: Okay. Well, I'll have some more 20 questions then later. Thanks. 21 DR. ZIEMER: Thank you, Jim. Thank you, 22 Larry. Other -- Okay, Mike Gibson. 23 MR. GIBSON: So are you saying that there can 24 be people doing the site profiles that have a 25 past history at the site?

the contract, so -- or the proposal, so that's

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DR. TOOHEY: Absolutely, that was in our proposal. We have to use people who have experience at the site 'cause they knew what was going on there.

MR. GIBSON: But yet it's not necessary, in your opinion, to give a background and their potential conflict of interest.

DR. TOOHEY: Well, we didn't put that in the proposal.

DR. ZIEMER: Okay. Robert Presley.

MR. PRESLEY: Do you have a procedure for somebody that is terminally ill, say from one of these other sites?

oh, what's the word -- compassionate processing that NIOSH has. My understanding -- and maybe the OCAS folks could reply to that. It pushes them to the head of the queue to capture their interview, primarily. It doesn't necessarily mean the actual dose reconstruction itself is accelerated, depending on the quality of the data and if it can be done without the site profile being completed. But let me also mention, the supplemental dose reconstruction teams, they would also have the task of doing a special

1 processing as required by the client. MR. PRESLEY: Thank you. 2 3 DR. ZIEMER: Okay. Mark? 4 MR. GRIFFON: I have some follow-up questions 5 also on the conflict of interest question, but I 6 think I'll hold that for after Jim presents. 7 Shifting gears a little bit, I'm interested 8 in this system you have with the 300 computer 9 users and is Privacy Act information exchanged 10 across that network --11 DR. TOOHEY: Yes, yes --12 MR. GRIFFON: -- and if so, can the Board --13 DR. TOOHEY: -- but not -- but not --14 MR. GRIFFON: -- possibly use the same 15 network? 16 DR. TOOHEY: -- but not by e-mail. Okay? 17 It's --18 MR. GRIFFON: Right, right. 19 DR. TOOHEY: -- you know, through dedicated 20 lines using what are sort of standard security 21 protocols. 22 MR. GRIFFON: Right. 23 DR. TOOHEY: (text redacted - four lines - per NIOSH, OCAS.) But basically -- well, yeah, we can 24 25 give anyone who needs it and, with NIOSH

approval, make them a user on the network and give you the -- what's called remote desktop software that enables you to get in, if that's something that NIOSH decides they want us to do.

MR. GRIFFON: All right.

DR. TOOHEY: Sorry about that --

MR. GRIFFON: That's for a later discussion for the working group discussion --

DR. TOOHEY: Yeah.

MR. GRIFFON: -- but follow-up on the
efficiency process --

DR. TOOHEY: Let me say one thing, though.

The vast majority, if not all, of the data that's out on our network is also on NIOSH's system. So having access, if you get it, into their network would give you essentially the same thing.

MR. GRIFFON: And a couple of questions on the efficiency process or protocol. You -- I saw maximum internal doses for these steps. Did you consider maximum external doses in these cases? I noticed you talked about missed dose. There's quite a bit of discussion about unmon-- potentially unmonitored dose, and did you look at using, as one of the efficiency protocols, assigning maximum internal and maximum external

and seeing how the cases fell out, as opposed to just maximum internal plus --

DR. TOOHEY: Uh-huh, well --

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MR. GRIFFON: -- missed dose.

DR. TOOHEY: But right now we're doing the maximum missed dose. Now the question comes up, what could the maximum unmonitored external dose Well, it could be almost anything up have been? to something that would cause acute radiation syndrome, theoretically. So we haven't gone in that direction yet. We're going on maximum missed dose for monitored employees. For unmonitored employees -- and that's a fairly small fraction, say of the work force at DOE sites. We haven't really nailed that down yet. But it's certainly possible and it's very similar to the approach with uranium. A maximum uranium intake that would put you in acute kidney failure, we could give you -- I don't know -- 100 rem external would start causing blood dyscrasias and -- and if it's still non-compensable. you know, if you get up to too high a dose, then everything falls out because it then becomes potentially compensable and --

In fact, we -- just one story. There was a

question at Savannah River about what point in time they were using a mobile photofluorographic unit in the 1950s for routine chest X-rays, and that's one to one and a half R a shot, and that was kicking a lot of these, if we assume maximum dose from that, into a compensable range, which knocks them out of the efficiency protocol.

MR. GRIFFON: Yeah, and there -- there's more detailed questions -- I mean I understand that, but also I think you could consider the -- the monitoring records over time, the external monitoring records over time --

DR. TOOHEY: Well --

MR. GRIFFON: -- to maximize your maximum.

DR. TOOHEY: Yeah.

MR. GRIFFON: You don't have to say, you know --

DR. TOOHEY: And we've got --

MR. GRIFFON: -- lethal doses.

DR. TOOHEY: You know, we're getting into area monitoring records and also, as we get more and more claims done, then we can use coworker data also to bracket that, I think.

MR. GRIFFON: All right, that's what I was going -- and -- and for the maximum internal dose

1 -- and maybe this is specific for Savannah River, 2 but how did you capture -- it talks about the five maximums -- intakes for each radionuclide --3 or the primary radionuclides of interest. 4 5 was that determined? What -- what resources, 6 what data did you use to determine that? 7 DR. TOOHEY: Basically it was Savannah 8 River's own monitoring records and incident 9 reports. 10 MR. GRIFFON: Okay. And -- and were those in 11 any way -- do -- does ORAU or the -- the site 12 profile teams, are you attempting to verify 13

those? I mean I imagine these are from bioassay monitoring records or incident reports --

DR. TOOHEY: Primarily they were from incident re-- you know, the existence of a high intake usually comes off an incident report.

MR. GRIFFON: Uh-huh.

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DR. TOOHEY: You know, glove box blows or something --

> MR. GRIFFON: Right.

DR. TOOHEY: -- so there's a potential. then the quantification of the intake comes from the bioassay data. Now what we didn't do, though -- again to be claimant-favorable -- was use the

old lung and metabolic models to work back to the intake, which is in fact claimant favorable.

It's generally a higher estimate of the intake than using the newer models. And comparison of the models and the resulting predicted maximum intakes are in that technical basis document -- or technical information bulletin.

MR. GRIFFON: Okay. So these maximums would have been based on reported incidents primarily -

DR. TOOHEY: Right.

MR. GRIFFON: -- from the -- from the data provided by the Department of Energy site.

DR. TOOHEY: Right.

DR. ZIEMER: Could you clarify for me the types of individuals who worked on a site who may now be involved in these site profile? For example, is it conceivable that an individual who at one time in the past was responsible for generating some of the data which is now used in the profile would be on a site --

DR. TOOHEY: Yes.

DR. ZIEMER: -- team and -- and at least perception-wise, be defending data that that individual developed in the past? Do you

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understand the nature of the question I'm asking?

DR. TOOHEY: Yeah, sure, I do. And the short answer is yes. I'll give you a couple of examples. One of our key subcontractors looking at external dosimetry data is Jack Fix, who probably knows more about external dosimetry across the DOE complex than anybody else. So did -- was he responsible for generating some of the data? Yes. Is he defending that data now? I'm not sure if that's what he's doing. He's providing it, and then it's subject to scientific review and analysis by people who did not generate it.

DR. ZIEMER: Give us an idea of the composition of a typical team you're using, and it's clear that we want to mine the information from those who are very knowledgeable, and yet questions might arise -- I think they've been hinted at, that one might become defensive about one's own past data.

DR. TOOHEY: Sure.

DR. ZIEMER: So what --

DR. TOOHEY: Well, the --

DR. ZIEMER: What is the mix of sort of outside independence on a team?

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DR. TOOHEY: The typical team is about a half a dozen people, would you say, Judson? Judson Kenoyer's here, who is our task three team leader, and will have some more input on that In general the people on the team for the later. site probably -- I would say -- it's fair to say in general probably did not work themselves at the site. The people who did or still do work at the site are used as resources for the team. Now Jack's one exception. He's -- he did the external dosimetry part of the Savannah River document and he's doing the one for the Hanford, and of course he did work there. But for the internal part of Savannah River, our primary resource for that data was Tom Labone at Savannah River. So he was -- I don't know, a consultant may be too strong a word -- a data source for us to use, but he was not actually on the team that produced the document.

And Judson, do you want -- would you like to comment on that?

MR. KENOYER: I'd like to add just a few words to that. As we put together these teams, we are trying to gather groups of people that basically had experience working at those sites.

They may or may not have been employees of the contractor on-site. Perhaps they were a subcontractor that had done work. With the idea that we needed to gather five or six people that had different areas of expertise, also -- internal dosimetry, external dosimetry, if they knew anything about the X-ray systems used. So it's a matter of trying to pull together a good cohesive team that had experience, that perhaps knew people that still worked on that site, or people that had retired, so...

DR. NETON: I'd just like --

DR. ZIEMER: Thank you. Jim Neton.

DR. NETON: I'd just like to add one extra piece of information. Each one of these teams has an assigned NIOSH health physicist who serves as a technical monitor --

DR. TOOHEY: Good point.

DR. NETON: -- of the technical basis

document or site profile for all 13 or whatever

currently ongoing. In fact, before it ever even

goes through formal review, I have a little slide

that'll demonstrate this, it is -- it is

essentially vetted by the NIOSH technical monitor

or worked with side-by-side until -- and then it

comes to NIOSH for review, and it is a document that is both reviewed by ORAU and reviewed and signed by NIOSH, issued as a controlled document. So NIOSH ultimately approves the technical basis document, not the person who may have worked at that site.

DR. ZIEMER: Thank you for that clarification. I think Mike Gibson has a comment.

MR. GIBSON: How many of these teams has a former field worker, such as a craftsman, involved in them, or maybe a current field worker such as a craftsman, that escorts them, that asks them have you looked at this event, have you looked at this potential event. That's one question.

The second question is if an event happens and it's found out about later and the report is generated later to where bioassay data wouldn't be adequate, how do you determine the dose to the employee?

DR. TOOHEY: Okay. Well, first -- first question, to my knowledge, we don't have any crafts or trades people on these teams. They're all health physicists.

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Second question, if incident occurred but was realized later, when it's below say the limit of detection of bioassay so you can't back-calculate to what the intake may have been, then you would have to work off any available data you do have -- air monitoring, surface contamination levels, skin contamination, levels on workers present, whatever you can get. And there are ways of converting air monitoring data to release and resuspension factors and all those sort of things, so we can bracket what the potential exposure could have been. And remember in this case we're trying to determine what the maximum could have been, not what the actual intake was. So all the way through that process in trying to back-calculate, we make the claimant-favorable assumptions to try to maximize the dose.

MR. GIBSON: And a third question, are you going back and when you're looking at the MDA for the different sites, are you also going back and looking at whether the QC that they've used to calibrate their systems and whether they've been fined by Price-Anderson* for elevating the MDAs to artificially high doses?

DR. TOOHEY: We certainly look at the

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historical MDA. And in fact that's one of the things in this process, like many others, which takes more time than we thought it would is going back -- I think Dr. Neton's presentation will talk about that. A lot of the notations in the records are extremely cryptic. For instance, we found whole-body counting records from Savannah River where the activity designations are A, B, It took us a while to find out what that meant. It turned out it actually referred to energy bands in the gamma ray spectrum. But yeah, we do. We try to go back, look at the QA records. And the calibration records, it's especially important on the external dosimeters, and we have had people looking at that. of our uncertainty analysis team is also specifically looking at that, also. Peter Groher* from the University of Tennessee is heading that effort up.

MR. GIBSON: And just one -- one thing for the record is, you know, I'm not questioning anyone's credibility here. I want to make the -- this is a thorough and proper process. Let's not forget we wouldn't be sitting here, this law wouldn't be on the books if the Department of

Energy had done its job right. I just want to
make sure that, now we're trying to correct the
problem, we do it fairly.

DR. ZIEMER: Thank you, Mike. We'll have o

DR. ZIEMER: Thank you, Mike. We'll have one more question and then Rich, if you would be available later in the morning, obviously this is of great interest and maybe when we get to your regular time slot we can have an opportunity to reopen things. But we do have a guest speaker who will have to be leaving mid-morning and we want to allow him to give his presentation before the plane leaves. So I'll allow one more question. Jim, and then we'll --

DR. MELIUS: I believe this is a brief one. My understanding is at the last meeting -- I was not present the second day -- that Larry Elliott had talked to the Committee about relaxing the conflict of interest rules for the people doing the individual dose reconstructions. Has that been done or what's --

DR. TOOHEY: No. We felt the consensus of the Advisory Board was that was not a good idea, so we have not pursued it.

DR. MELIUS: Okay. Thank you.

PRESENTATION BY DR. JOHN TILL, RAC

DR. ZIEMER: Thank you very much. Our next agenda item is a guest speaker, Dr. John Till. Dr. Till is president of Risk Assessment Corporation. I want to give a little bit of biographical information. I'm not sure if -- it's not in your book, so let me -- John, I'll try not to use up too much of your time, but you have such an important resumé I want to give a little bit of that.

John is a graduate of the U.S. Naval Academy, served in the U.S. nuclear Navy submarine program. He retired from the Navy in '99 as a Rear Admiral. He's a recipient of the Distinguished Service Medal, Legion of Merit, a couple of Navy Meritorious Service medals and other commendations. Dr. Till is -- has been a recipient of the Ernest Lawrence Award, which is an award of the Department of Energy in the field of environmental science and technology.

In 1977 he formed a company called the Risk Assessment Corporation -- I think originally it was called Radiological Assessment Corporation -- and since its formation that group has played a very key role in the evolution of methodologies for environmental risk analysis.

John served as Chairman of the Technical
Steering Panel for the Hanford Environmental Dose
Reconstruction Project. He's been principal
investigator in the successful completion of
Fernald Feed Materials Production Center
Historical Dose Reconstruction Project. He's
been involved in Phase II at the Rocky Flats
Plant Dose Reconstruction Process, Phases I and
II of the Savannah River Dose Reconstruction
Project, and there are a number of others, so you
get the point.

John's very well-published. He has over 175 publications. He edited the first book on radiation dose analysis called *Radiological*Assessment.

He's currently a member of the ICRP,
International Commission on Radiological
Protection. He's Chairman of the National
Academy of Sciences review committee that
reviewed the dose reconstruction program of the
Defense Nuclear Threat -- Defense Threat Nuclear
Agency, and we're going to hear about that
shortly.

DR. TILL: Paul, that's enough.

DR. ZIEMER: I left out the most --

DR. TILL: That's enough.

DR. ZIEMER: -- the most important thing,

John, to you. John is also a farmer. I think --

DR. TILL: That's important.

DR. ZIEMER: -- originally was a dairy farmer, still has that big farm and loves farming, as well.

DR. TILL: That's --

DR. ZIEMER: John, welcome.

DR. TILL: -- the most important thing, the last. I am a farmer and I love it. And I am very honored to be here and speak with you. I've heard quite a bit about your work. Thank you very much, Larry, for your gracious invitation.

And Paul, what should I do, try to quit at 10:00 or do I have a bit more time? Well, I won't take longer than you've allowed me, but maybe we should set up a few ground rules.

I would encourage you to stop me at any time if you have a question, and let's talk. And if we see we're getting hung up too much and I'm not getting through some of the key points I'd like to make, then we'll change the course of action, if that's all right.

A few things I need to say from the outset

this morning is that I'm not speaking for the National Academy. I'm speaking for myself. And that's important because I think I want to say a few things that probably are not in the Academy report, and I may point those out to you as we go.

The report itself will be published on
Friday, and I spoke with the Academy last week
and I asked them, Paul, to be sure and send you
copies. I said send Paul Ziemer as many copies
as you can. I think they're aware of your
committee and hopefully they'll do that, but it
should be published this Friday. It has been on
the web, as you know, and that's what I want to
focus on is the Academy report, but throwing in a
few other personal comments, if you don't mind.

The Academy report was a great privilege for me. It was the first time I'd chaired an Academy committee. I've served on many of them, but I'd never chaired one before. We took two and a half years to do the work.

I want to also make sure that you understand that what I say this morning is not intended to be critical of any individual, any organization, whatsoever. And not that what I say is caustic

in any way, but I think we sometimes forget how science evolves and how we evolve as people and what we do and what you're doing right now, for example, is quite revolutionary. And I can guarantee you one thing, and that is after you've been here for a number of years -- and Dick, after you've done this work for a number of years, anybody can come in and tell you what you did wrong from the beginning and what you're doing wrong and how to make it better. And don't forget that. And don't forget to convey that message to the claimants, I guess that's the proper term, that we're getting better at this all the time. And right now, frankly, we're in our infancy with regard to this science, and probably with regard to what you're trying to do, which is to administer a law that this country saw fit to put into place.

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I'm going to stop occasionally and look at my notes to be sure I'm covering things 'cause I'm sure I'm going to get off track here from time to time. I have no presentation. I did that deliberately. I'd rather you listen to what I have to say. Much of what I have to say you can read, and I really encourage you to read this

1 report that is going to come out this week.

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I want to say one thing in particular about the Academy and the Academy's work, and it's directed to Mike Schaeffer who's back there. Mike, I really commend you. And I have been reviewed by the Academy -- in fact, almost all of my work for 15 years has somehow gotten into the channel of Academy review. And frankly, I've found it downright annoying that you can bring in this group of experts to sit around the table, who suddenly -- after you've been doing the work for three, four, five years and you've put together this magnificent report, that these experts who suddenly come in think they can pick up in just a matter of meetings everything that you've done and tell you what you've done wrong, and very seldom compliment you on what you've done right, I found very annoying.

On the other hand, it was also refreshing. I also learned. I had the opportunity to look at what they recommended and say you're right or wrong, and in some cases, the Academy was downright wrong about what they said, and we challenged them on it. And at least I felt better afterwards. But I think it is the

character of how you accept the recommendations of the Academy, or any other high and mighty -- almighty group.

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And Mike Schaeffer, you have done this magnificently. I know that you've taken on many of the recommendations already. I don't know specifically, but I've heard incredibly good Plus I think DTRA, SAIC, the VA, were at an incredible disadvantage to what you have, and that is they did not have this knowledge and they had a program that was 20 years old. really took about 20 years before some outside group, like us, came in and looked at their program in the depth and thoroughness that we So I want to personally congratulate you, did. Mike. But all the others at SAIC, at J-Corps and the VA, as well. Tony Princippi has also been very responsive to what we said.

It wouldn't be fair for me not to mention the other committee members -- Harold Beck, Jay Brady -- and if you don't know Jay Brady, he is quite a character, a wonderful man to serve with, with incredible experience -- first-hand experience at the testing site -- Tom Giselle, David Hoyle, Eric Kearsley, Dave Kocher -- Dave's here --

yeah, he's going to keep me on track here this morning -- Jonathan Merino, who's a bioethicist, and I'd never worked with a bioethicist before on a scientific committee, but what a wonderful contribution Jonathan made to our work; Clair Weinberg, as well. And of course Evan Dupole and Esoph at the Academy, just an incredible group of people to work with.

As I accepted this job with the Academy to chair this committee, I knew it was going to be a difficult task because I had been involved in dose reconstruction work for quite some time. I know how tedious it is. I know how complex it is. I know how much information is always missing, usually far more than you have to work with. And so it was with some bit of concern that I accepted the job as Chair.

I was also a bit familiar with what DTRA was doing, and the veterans' programs, but not in great depth. And the reason I was somewhat familiar with it is because I had an opportunity to serve on one of the Academy reports, the five series study. It was an epidemiological analysis, looking at disease among some of the atomic veterans in five different series to see

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if we could see an effect. When we started that work we hoped to be able to assign specific doses to the different cases. And I was asked to lead a small task group in the work, and that was to decide whether or not the dosimetry that had been developed over the years by DTRA could be used in fact in the epidemiological analysis. And the conclusion of that small group was that we could not, that this dosimetry was not suitable for epidemiology. And that's the first point that I'm going to make with you today that I hope you'll remember, and it's not in the Academy report.

I want to challenge you, I want to challenge this panel, I want to challenge the scientists who are working on this, and I'd like to challenge NIOSH to make sure that what you're doing in this study is not merely fulfilling the law. But let's advance the science. Do not miss an opportunity to let's push the science a notch -- more than a notch.

I'll mention a couple of things as I talk
this morning where I think those opportunities
might exist. I know that you're open to this,
but let me encourage you that -- let me tell you,

in my opinion as a scientist and as a taxpayer, it is not sufficient to merely fulfill the law. We've got to raise the level of the science that we're working with. As you get into this you're going to realize how little we know about dose reconstruction, how little we know about the exposure situations that occurred, or even how little we know about the validity of what you're trying to do. That is, to compensate people based on these calculations.

So the point there is I had some insight as to what I was getting into before I started this, but I had no idea how complicated it was ultimately going to be.

You should know that this Academy report does not deal at all with the idea of compensation.

Whether it's good or whether it's bad and whether you agree with it or don't agree with it, or whether we agreed with it or did not agree with it as scientists had nothing to do with the report or what we did. We were there to decide whether or not the science was being done and the law was being fulfilled. So we could not and you cannot allow personal feelings to get involved in what you do.

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So the approach that we took to the work was that we knew we were stepping into a situation of volatility and a lot of visibility with the Academy report. And I think this Academy -- I'm not certain about this, but I think this Academy committee did break some new ground with regard to public involvement. I know they've been working at this for a long time. If you work with the Academy, you know it's a quite closed organization. They have incredibly strict rules for how they work.

But on the other hand, we thought it was important to meet the veterans, to have the veterans talk to us, to go to them on their turf -- which we did. We wanted to be sure that what we did was thorough and defensible. Did we accomplish that? I don't know. Time will tell.

So in the beginning we set a course to do several things. We were actually obligated with our charge, which I'll come back to in a few minutes, to develop a statistically significant sample from which to work. At the time we began, there were about 3,700 dose reconstructions that had been performed. We decided to take a sample of 99. We felt that was statistically

significant. About two-thirds of those we wanted in the higher dose category, so we said they had to be a dose above one rem. But we were also concerned that if we did that, we would neglect one very important group and that were the veterans from the Hiroshima/Nagasaki, either prisoners of war or service men and women who served in Japan following the A-bomb tests. we took a separate sample of those. about ten. So we were working with about 110 of our own selected -- randomly selected samples. But in addition, we encouraged veterans who wanted to to send us their files. We got about two dozen of these. And we did work a number of these files and we found them quite interesting, and some very supportive information for our report.

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So how did we do this? We set out, for about the first year and a half, aggressively reviewing these files. Every committee member looking at every file, and that takes time -- a lot of time -- to go through each file, to try in your own mind to decide do you understand what's being written here, do you agree with what's being written here, what are your problems.

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So a few other things we wanted to do as we drafted this report, we wanted it to be understandable by Congress, by scientists and by the veterans -- and by anyone else who might read it. Now did we achieve that goal? Probably not, but I do believe that a lot of what we did is understandable. I mean I will tell you that when you read a couple of the chapters, you may get I mean even we did, as we go through this from time to time. We had some very bright people who were working on this. However, I think as a whole, when you look at the report, everybody can get something out of this. there are parts of this report deliberately written in the language where we hoped the veterans would understand what we're saying.

We wanted to be detailed, very detailed, and I challenged the members of the committee as we drafted this report to be specific, to put case numbers down so that anybody who wanted to go back, these cases are available -- not the names, but the cases. So anybody who wanted to go back and see what we were talking about could certainly do that.

We wanted not only to show what we thought

was incorrect or weak, but the strengths of the work. And where something could be done more correctly, we wanted to show DTRA or the scientists working on this how they could do it better.

So just briefly, when you see the report you'll see an introduction. You'll see a chapter on the process of the committee that explains basically what I just told you now. You'll see a chapter on the process for claims, how does a veteran file a claim and exactly what are the steps that it goes through. Believe it or not, that was very difficult to sort out. The graphics that you see in this report, we developed, because there was not a single graphic that the VA could bring in, that DTRA could bring in that showed the entire process -- at least not clearly. I'm sure -- I'm sure we had some examples to work with.

There's a chapter on the dose reconstruction process and what that does. It focuses on how we saw the process being done, without the critique. This is the way it was being done. These are the steps being followed. These are the assumptions. These are the models being used.

And then there's a chapter on findings, so if you're doing it this way, what's good, what's bad. Here's how we recommend solving problems you might have.

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And then a very key chapter, and I'll talk about a few of these as we go through this this morning, where we had other findings. strictly dose reconstruction, but things related to dose reconstructions. And I have to tell you as I read the charge in a few minutes, you're going to think wow, that's pretty restrictive. We were very broad in interpreting our charge. And I think this committee went as far as an Academy committee can go to give -- to give DTRA, to give the Congress, to give the veterans more than what we were asked in the charge. hope we did that. In fact, we probably -- we tried to go a little farther in some cases and we felt that it was inappropriate, but other findings like communication with the veterans; the bioassay program that DTRA had instituted something called the low level dose screen, which was a huge credibility issue; and what are the implications to the veterans of what we're saying. And then we had conclusions and

recommendations. You'll see all of this when you look at the report. If you have any trouble getting these, Paul, give me a call, please.

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We were also confronted, when we began the work, with the fact that the Academy has looked at the veterans before. Now that's interesting, In fact, in 1985 the first Academy isn't it? report on the mortality of nuclear test participants, there were some problems in that report with numbers and so forth in 1985, and that work was ultimately redone. In 1985 there was a report by -- that Merrill Eisenbud shared on methods. That's interesting. 1989, a very solid report that Frank Massey chaired on external dosimetry. In 1996 an Institute of Medicine mortality of participants, that was sort of a repeat of the earlier work looking at -- it was an epidemiological study. In 2000, the five series study that I participated on. So what happened? So why is what we're doing so new and different?

Well, the problem is that the right questions were not asked before. That's one problem. And in great respect to Merrill Eisenbud, in 1985 when he looked at this, this science, this

business of dose reconstruction, was really in its infancy. And Merrill and his committee pointed out some very serious issues that we still found when we looked at this work.

But the point I'm making here, and it is important because you need to challenge those who are going to verify what's being done, be sure you're asking the right questions, or you won't get the answers that you're looking for.

I also believe that in the work that we did, no other committee -- no other Academy committee, aside from the fact that they didn't have the explicit charge that we had -- and this may not be a fair statement and I might have to qualify it -- but did not look with the thoroughness and aggressiveness that this committee looked into with regard to these doses. And it's certainly not fair to say that about the epidemiological studies, but perhaps they never had an opportunity.

You need to know something about the history, and this is important, of the history of that program because there's a point I want to make at the end, and I'm not going to say much. But this started a long time ago, this issue with atomic

veterans and disease and the concern about disease and the dose reconstruction program has been in place for a long time, over 20 years this has been going on -- 25 years when you look back.

In 1977 when there was reported an increase in leukemias among participants at Shot Smoky* and that was Glen Caldwell's work, and I think that was the report that first elevated the concern about exposures of veterans.

In 1998 Congress authorized the NTPR program, and that was really to start pulling the information together on the veterans. And thank goodness at that time Congress did act, because a lot of the records it's possible might not be with us today, or might not have been retained.

And also in 1978 DTRA and -- well, it was DNA at that time -- was responsible for determining or looking into VA eligibility. In 19-- for compensation.

In 1981 the first public law was passed. In 1984 the law was amended, and that's when we really got into the dose reconstruction process, about that time, so that doses had to be calculated.

The law has been changed about 15 times. Now

why is this important? It's very important to keep in mind that the science is always changing. And so much -- in fact, I'm sure if you're in a different field of science, you'll say that your science has changed just as much as this whole business of dose reconstruction. But by golly, I've been in this for a while now, and I don't know that I know of anything -- other than the medicine field and the phenomenal advances we're making there -- but I don't know of any other area that's changed quite so much -- our ability to grasp information, our ability to do something with huge amounts of data. We couldn't do these things 15 years ago -- ten years ago. And so much even in the last five years.

And so as you're critical of what happened in the DOE complex 20, 30, 40, 50 years ago, don't forget that fact. And I think you have to keep in mind that it very well may have been what you're seeing as changes in the science, changes in our expectations of scientists and data management, and not the fact that somebody -- and I heard the comment this morning, and I'm not defending DOE. I -- believe me, I'm not. But on the other hand, somebody said well, they didn't

do their job. It's pretty difficult for us to -in my opinion, to make that statement because
we're not living in that time. So that's why the
history is so important. And it will change. In
the next five years and, Larry, by the time
you're finished with this task, I can guarantee
you what you see today, what you do today is
going to be so different.

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So a question that this leads to, which is also not in our report, so what do you do about the changing science, and what is your policy about changing science? Do you have one? Maybe If you don't, then think about it. you do. What is your position going to be that if you're using ICRP dose coefficients, and I assume that perhaps you are, when those dose coefficients are upgraded over two years of time and maybe the dose coefficient for plutonium inhalation goes up or goes down, so what are you going to do? you going to change the science as you go through the process -- and I hope that you will, because that's what my recommendation would be to you. But then what does that lead to? What do you do about doses you've already calculated? you do about people that you've already

compensated? These are some serious thoughts that I want to leave with you.

And I think that was one thing in our report that we didn't feel was handled very well, at least a clear policy on what you do about changing -- changes in the science. And we felt that for -- in a lot of the methods being used, the most up-to-date, the most current information was not being used to calculate doses.

Am I going too fast? Are we doing all right?

I hope I'm saying something worthwhile to you. A

lot of this is off the cuff and not in the

report, but what I'm going to do now is shift to

the report itself just a little bit.

The first thing I want to do is just to mention the charge of the committee. And this was written -- I suspect it was written by Congressional staffers 'cause let me just read the first charge.

(Reading) Whether or not the dose reconstruction of the sampled doses is accurate. Isn't that wonderful, the word "accurate"? Is anything we do in this accurate? I don't think so. And so, you know, here you are, the committee, how do you respond to a question like

that? Well, we interpreted that question -- well, I'll come back to that in just a minute.

The second charge was (Reading) Whether or not the reconstructed doses are accurately reported to the VA.

The third charge, (Reading) Whether or not the assumptions made about radiation exposure are credible. What does that mean? Whether or not the assumptions made about radiation exposure are credible.

And fourth, (Reading) Whether or not the data from nuclear tests used by DTRA as a part of the reconstruction of sampled doses are, again, accurate. Whether the data are accurate.

And then the committee was also asked to recommend whether there should be a permanent system of review for the dose reconstruction program. Let me answer that now. Absolutely. Absolutely. And I think if the DTRA program has suffered from anything over the years, it's the fact that there's not been a group like you to take responsibility for advising them on the science and for challenging them, as you have this morning on things like conflict of interest, communication, quality assurance. And so we did

recommend that a permanent system of oversight be put into place.

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Now I think it's important that I just go ahead and hit right now the way we said that. If you saw the report, when we responded to that question we said if the program continues, yes, we think there should be a permanent system of oversight.

Now I'm going to go back into the John Till mode and I'm going to tell you what that means. We struggled with value of what was being done, and this is just me talking now, ladies and But I think we have to look at the gentlemen. value of what we are doing, as a country, as taxpayers, some of you perhaps as claimants, the value of what we are doing. What is this costing us overall to administer a program that delivers some benefit to these individuals -- quite deservingly so, but what is it costing us? don't know the answer to what it costs DTRA, the I don't know the answer to that. think the committee struggled with the question of value and was what was being done, and the cost of administering this program for 20 years, and what was actually being paid out worth it.

I'll give you an example of why this came up

-- or at least in my own mind why it came up. We
struggled on the committee trying to find out how
many individuals out of some 4,000 dose
reconstructions that had been performed -- and
I've missed talking about the law, and I hope
you'll forgive me for that.

There's a presumptive law and a nonpresumptive law for disease. The presumptive law
means that if you have a certain type of cancer
and there are about 21 cancers and you were there
at a test site, you're compensated. The nonpresumptive law accounts for those individuals
who don't have the presumptive disease who claim
they were there or who have some disease and want
to be compensated, and that's when you shift into
this mode of the dose reconstructions.

So over the time, there were about 4,000 dose reconstructions. And we asked and were very curious to know, well, how many of these claims had been awarded. And so we went to the Veterans Administration and we asked them, and the numbers always came back a little bit different, but on the order of I think 1,500 or 1,600 or something like that. And we were really puzzled because

the numbers didn't add up in our sample of 99. We just couldn't see it.

And so we did some more investigating into this. It turns out -- and this is another point, but I'm sure you've got this one resolved, Dick and Larry, and that is we wanted to go into the database and punch some buttons and do a query that said out of these dose reconstructions, how many successful claims have been awarded? You couldn't do that. And when you did it, you came up with the numbers that included a lot of other categories and it just couldn't be sorted out.

And so what we did, and the VA worked with us because they were really curious. The veterans had been saying for years and years the number was on the order of about 50. The VA was saying on the order of about 1,500, 1,600. Big difference there. Huge credibility issue for us, to be able to sort this out. So we took a sample of 300, looked at them individually. The answer is about 50. And that's the best we can sort this out, about 50.

Now whether or not that's good or bad to you has nothing to do with this, but it does, in my mind -- John Till speaking -- raise the issue of

value of what we're doing. So I'll leave that thought with you.

So what were the answers to our charge? With regard to whether the dose reconstruction of sample doses is accurate, the committee concluded that credible upper bound doses from external gamma, neutron and beta exposure are often underestimated and sometimes considerably. And that's what we reported in the press conference.

Now what that didn't say is that the average doses that are calculated are pretty good, especially the external gamma doses. The average doses are pretty good. It was the upper bounds we were concerned about, but the upper bound is what's reported for compensation, and I know you're doing the same thing. And we were looking at a 95th percentile upper bound on the dose calculations.

In response to question number two, whether or not the reconstructed doses are accurately reported, the committee concluded that as they have been calculated by DTRA, they have been accurately reported to the VA and the veterans. In other words, we're reporting the numbers that we calculate, even though the numbers we're

calculating may not be the correct upper bound, but we are reporting. So the answer to that charge is yes.

On the other hand, with regard to reporting information -- and I want to come back to communication before I finish; I'll have to get a few words in about that -- we're doing a lousy job of trying to explain to veterans what these doses mean.

And I challenge you to do that to your claimants. And it's tough. From what I know about what you're doing -- what little I know about what you're doing, I think you are making a great effort at this and you are opening your meetings and you are trying to explain to people, for example on a probability of causation, what it takes to get an award -- a successful award. So I congratulate you on that.

In response to question three, whether the assumptions made regarding radiation exposure are credible, the committee concluded that many key assumptions and methods being used are not appropriate and often lead to underestimation of the upper bounds of doses to atomic veterans.

That is a very difficult charge to respond to,

because much of the information -- most of the information is very good data to work with.

One key point there -- and I'll come back to this and hopefully can read you a couple of these cases -- is benefit of the doubt. And in that area, we felt this charge -- they didn't meet this charge, in particular because of following with the responsibility of benefit of the doubt.

Regarding the fourth question, whether the data used by DTRA to reconstruct the sample doses are accurate, and we interpreted this to mean are the data that we have to work with to reconstruct these doses for atomic veterans, is there enough information there to reconstruct the doses. And if you haven't looked at some of that information that was compiled early on in the NTPR program, it is quite astonishing. It is a wealth of information. And thank goodness Congress, DTRA, took the time to put all of that together at the beginning 'cause it's some good solid data to work with. It's amazing how much information was collected at these tests.

I honestly don't know how much you have to work with. And Dick, one of these days we'll have to have a little chat about that, 'cause I

think you may be more in the dark -- far more in the dark than DNA when they first started out this work, the information they had to pull together.

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Okay. So just a few other key conclusions. Quality control was a real problem. A real problem. And as we went through these records -and this is where I'm not trying to be critical of DTRA or any of the contractors that worked on this, but we had a very, very hard time following the logic of the calculations, following the documentation that was there. And in a lot of cases it was -- we just couldn't do it. It was impossible to do. Documentation is absolutely crucial for what you are trying to do. estate it's location, location, location. Ιn dose reconstruction it's documentation, documentation, documentation.

And how would I address that if I were you?

I would -- I would make sure that what you're

doing is checked. I heard this morning you're

having it checked by a couple of people, which is

certainly essential to do. But make sure

somebody coming in off the street who knows

something about the science, who has not been

involved -- intimately involved in this process you're doing, can take those records and follow them. Every assumption that was made and how the numbers were calculated.

So one of the other things in the report we thought that this was very important to say, and that is okay, so you read what we have done. You read -- when you read this report you're going to think there's a lot wrong -- perhaps you will -- a lot wrong with how the doses were calculated for the veterans. So what does that mean? What are the implications of what we found?

We thought it was important to mention that out of the thousands of dose reconstructions that have been filed that if you were to go back and redo all of these dose reconstructions, what difference would it have made in terms of the number of cases or claims that had been awarded. And the answer is, we think it would make very little difference.

Now the reason for that is very apparent when you look at the methods we're using, the methods you are using, the probability of causation approach -- which I do think is a very solid approach for compensation. But the point is that

in order to be compensated under this program -and remember, it's very -- very, very favorable
to the veterans because you're doing a 95 percent
confidence interval on your dosimetry. You're
doing a 50 percent PC with a 99 percent
confidence interval. I mean this is incredibly
favorable to the claimants. But most of the
veterans do not know and did not realize the
level of dose that it takes to be compensated.
It's a huge communication problem, and I hope
that you, as I said, can solve that as you go.

So if you were to go back and recalculate all these doses, what difference would it make? Probably not a lot. And I was talking to Tony Princippi, the Secretary of the VA, about this. And of course you might say that in one sense and think well, you know, it's probably not worth it. He is responsible for all of those veterans, and he is listening to what you are saying and he's said would it make a difference in some cases? Those are my guys out there. And yes, it would. And so he interprets this completely different from what some of you might. And yes, it would make a difference in some cases.

Okay. Other findings, and I've mentioned a

few of these and I'll kind of try to wrap some things up and I wanted to read you a couple of things. Communication with the vets, I think what was lost in that, it's not so much the idea of telling the veterans here's your dose, here's what it means. But it's also the idea of listening to what the veterans have to say. That was not done. The veterans have a lot to -- had a lot to tell us about what they went through. And I want to read you a couple of things in a few minutes, so communication very important.

Bioassay -- and Mike Schaeffer and his group set out I think with something that was very, very important, and if nothing else, it was huge statement. And that was they tried to institute a bioassay program looking at plutonium with urinalysis, for which we have some very sensitive methods, to see if there's some correlation and to see if this method could be used to help validate some of the dosimetry. I don't think that they succeeded at this, and there are a lot of reasons why and it's certainly not their fault because I commend them for the statement of trying to do this. But that's an example of an area where we are making phenomenal progress in

science is the bioassay. And one technique in particular -- and that is not my field and so don't ask me a question about it, but I try to read about it -- is the work in this fluorescent in situ hybridization method which, from what I understand, could be very amenable to what you're doing. And I don't suggest this as a part of the compensation program, let me make that clear. I don't know how it fits in. I do suggest it as a part of the science.

Where I challenged you at the beginning of this talk to further the science, I think there may be some opportunity for you to look at high dose situations and to see whether the biodosimetry could correlate, not to back up a dose in any sense, but to -- it's something I think you should think about. We did look hard at the tooth enamel biodosimetry and we had some people coming into all of our meetings really pushing this method. But I don't think the level of sensitivity of that approach is quite where we need it to be. But anyway, I want to leave you with that thought.

I said I would mention the internal dose screen, and this is interesting because it was a

huge credibility problem that I think DTRA fought for many years and just never could explain. Early in the process there was a method developed where -- and if you know something about the deposition of fallout on soil, then if you know how much was in soil you can make some calculation of what a person might have inhaled through some resuspension back calculations, so what they got in the body so you can calculate an internal organ dose, basically. And so they came up with this method called the internal dose screen -- and the idea is not a bad idea -- that you could, by knowing what's on the soil, sort of decide whether or not there's some potential for internal dose. It's a screening process where it's either you're in or you're out, and it's not a bad idea.

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But this got picked up by the veterans and of course they're very critical and concerned that a lot of people were being eliminated and internal dose was not being calculated because of the use of this internal dose screen. And so we tried to tell the veterans after we looked into this well, they really aren't using it. But you go to the records and here it is, internal dose screen,

passed. Or internal dose screen, failed. And you see why they were so confused.

And so we put -- and Dave Kocher wrote this information that went into our report, trying to explain to the veterans about the internal dose screen. The bottom line is, it was not used.

So a message there is be careful with what you say and be careful how you document something, that it is going to be picked up by these individuals. And if you're not using it, make it clear why you're not using it.

Okay. And I think I'm getting through most of this and I'm going to wrap it up in just a moment, Paul. So let me just talk about three issues and then I'll read you a few things from the report that I think you'll find interesting.

The three things I'll mention now, and these will be in the examples and that's why I wanted to mention them -- benefit of the doubt, I've mentioned that before. Let me read to you what that means -- and I assume that you are confronted with this, as well. Is that correct? And -- and the law, and this is written in the law -- (Reading) When after careful consideration of all procurable and assembled data, a

reasonable doubt arises regarding service origin, the degree of disability, or any other point, such doubt will be resolved in favor of the claimant.

Now I could read on, it's a fairly lengthy paragraph that's legal language -- it's quite legal language. But basically it means if you don't know something and there's a chance that it could have happened, then you have to assume in favor of the claimant or in favor of the assumption that makes the dose higher. Right? Okay. So benefit of the doubt was very important.

Second point is consistency, and I think this is absolutely critical for you to keep in mind, over time, that you are consistent, that you are dealing with claimants in exactly the same way with exactly the same fairness, with exactly the same assumptions where you have a choice. And that you're also being consistent between your claimants so that you can say well, look, we've done it exactly the same way with this person and this person as we are doing it with you. And we had some problems with consistency.

And third point is uncertainty. And I don't

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want to get on -- get off track when I talk about this, and I'm going to be very blunt with you, and some of my friends will not like what I'm about to say. But I'm concerned that we're getting too far ahead of ourselves with uncertainty. I think it's a great tangent to our science. I think it's wonderful that we have the calculating tools that we have today that ten years ago you'd have to have a mainframe computer to do. But I also worry sometime that we're misleading people when we suggest that uncertainty is accounting for all of our lack of knowledge when it's a part of the lack of knowledge. I don't know how to make that any more clear. But I urge you to be careful here. And there may be some situations -- and it might simplify your work, Dick and Larry, in particular, when you think hard about going through a mathematical calculation or a Monte Carlo analysis when you can use a single number that might take some upper bound into account. And I will be honest with you that over the last couple of years as a scientist, I'm more and more going back to the simple roots where I started from, where deterministic calculations are not

always bad. And by making a deterministic calculation doesn't necessarily mean that we're perceived to be ignoring all of this variability. I'm not trying to suggest to you in any way that you don't do Monte Carlo calculations. I just want you to be careful about what you can defend and what you can't defend as scientists.

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I'm on Committee IV of ICRP, and right now one of the things that we're looking at -- and we have a committee that probably -- that is trying to take this on. ICRP has never clearly defined -- and ICRP is the International Commission of Radiological Protection, if you don't know, I'm sorry -- and it makes recommendations to the world about how we protect people in the compliance area -- primarily in the compliance We want to protect people. But for years area. ICRP has gotten better and better at coming up with dose conversion factors for the fetus, for the six-month-old, for the one-year-old, for the ten-year-old -- I mean we have really gotten to where we can refine -- or I think we've refined dose to all these individual age groups and different sexes and so forth.

But as we look back on it in ICRP, we're

concerned that these different categories are being misused -- for the compliance purpose, now; for the compliance purpose. And so one of the things that we're looking at is how can you put together and age-weighted dose coefficient that takes into account an entire lifetime of an individual, because really that's what limits are based on is lifetime exposure. So that's something that's being done.

And another thing that's being done is that ICRP wants to make it very clear what is assumed to be uncertain and what is not, in the realm of radiation protection. A little different from what you're doing now. But dose coefficients in the ICRP system are assumed not to be -- are assumed to be -- are assumed not to be uncertain. I want to be sure and say that right. In other words, they're fixed, for radiation protection purposes. I'm going to tell you again, that's not the way you're using them, the way I understand it.

On the other hand, my point is, just be thinking, if there are some things in your calculation that you really just don't have a clue, and by coming up with a distribution of

possibilities you're really stretching your imagination, then why not use a fixed value and just tell people that's the way it is.

Okay, I'm off that soap box. All right?

So let me just read you a couple of things
and then finish up here. I'm okay on time, just
a few more minutes? Okay.

I think just a few of these cases. We found the records just absolutely fascinating, and I think, as much as anything, what the veterans were saying. It is amazing the effort that some veterans went to to try to explain to these dosimetrists what happened to them.

Let's see -- I'll also tell you that this report -- I wanted it to be readable and I wanted it to be interesting, and it's got photos all the way through it, so you'll enjoy looking at some of the photographs. You will be absolutely amazed at some of these photographs where people are leaning into this tank that was just a few hundred yards from ground zero very soon after the shot. The conditions -- the dust and so forth -- under which they worked was amazing to me, that's for sure.

Okay, here's a case, this is case number 22,

and I'm just going to read this. It says
(Reading) The participant claimed that he was
present at Operation Ivy. His service records
have been damaged and his claim that he
participated in Ivy could not be verified. He
was not given the benefit of the doubt in
evaluating his claim for a non-presumptive
disease and no dose was calculated for
participation in Ivy, nor was the estimated upper
bound of his assigned dose from his participation
in other tests adjusted to reflect his possibly
participation in Ivy.

But he was never contacted to investigate this matter further, so now there's a case where the veteran says I was there, the records might indicate you can't prove he was there, so what do you do? Benefit of the doubt.

Case 53, this case provides a good example of inconsistent -- remember consistency -- inconsistent application of assumptions used in estimating the external dose in the upper bound from boarding target ships at Operation Crossroads. The dose memorandum states that the veteran was given the benefit of the doubt by presuming that he participated in two-thirds of

the target ship boardings by his unit. However, the calculations in the case are based on only one-third of the boardings. In other cases involving target ship boarding -- and we give the number of some of the other cases -- veterans were usually given the benefit of the doubt by assuming that they participated in all boardings.

Consistency, remember that.

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I think I'll just do one more and let me just tell you -- tell you this story. It's kind of -quite amazing, because the very first time we went to DTRA to look at the records, we were sort of given free rein of pulling out the files and picking a file and then if we wanted to take one back with us, they were going to take any reference to name off, redact it. I happened to go into a file -- and totally at random I pulled this record out. It turned out to be possibly the most interesting in the whole study. there was a veteran who was an aircraft crew mechanic and he filed for a dose claim, and his story was this; that there was a test in the Pacific and these sample planes, as you know, flew through the cloud. And the planes -- when they did this, they were collecting samples, but

they also became quite contaminated, just the fuselage of the plane itself became very Two of these planes were flying contaminated. together. One of the planes had a serious mechanical problem and went down in the ocean. The other plane, because he was trying to stay with his fellow pilot, had to make an emergency landing on Kwajalein, I think it was, the island. And when he came down, he really hit the runway hard and it blew the tires on the plane. was stuck there. He was also about out of fuel. And so this mechanic was flown in immediately to repair the aircraft and to refuel the aircraft. And so he came in -- now think about this. is very, very soon after the plane had been flying through the cloud. He came in and -we've got a picture of the aircraft, but he gets down, he changes the tires. And the veteran said he was there about four hours.

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The analyst who did the dose reconstruction said it took about one hour. But that's not the key point. The key point is that in the initial dose reconstruction he was assigned a dose of zero. And the veteran just didn't buy this, and he -- he also had pointed out it took more than

four hours to get decontaminated when he finally got back.

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So he complained and they reconstructed the dose and the second dose reconstruction, what they did was to start working with the -- an exposure reading four inches from the pylon on the aircraft, but it was four days later. Which theoretically that's not a bad idea because if you can just extrapolate back in time, you should be able to come up with a reasonable estimate of what the reading was on the aircraft. Unfortunately they didn't take into account that this plane was likely scrubbed -- washed. Okay? And we know that they were and we've seen the And so the second dose that they came up data. with was -- was not much better. I think it was .8 rem.

Anyway, when we looked at this record, we really took issue with almost every assumption that they made. But I think that's a good case where the veteran persisted and persisted and persisted and persisted and finally the dose reconstruction was raised enough -- I don't know whether or not this veteran received compensation, but it's an incredible story and the level of detail that you

have to go into in these dose reconstructions, I think that's just one of the best examples I've ever seen.

I think I'll stop and if you want, we can just chat a bit, Paul, or if there are any questions. I am going to stick around for about an hour before I have to leave.

I want to really commend you all for what you're doing. There is no amount of money that's going to pay you -- no amount of government money, anyway -- that's going to pay you appropriately for the time that you're putting in to do this.

On the other hand -- wow, what I have learned over the years from some of the work that I've done is the importance that there is some kind of oversight that represents the entire spectrum of views, non-scientists and scientists, because ladies and gentlemen, we don't have all the answers. I was very intrigued by your -- Dick's talk this morning, by the questions that you asked him and how you challenged him on credibility, on conflict of interest, on the details of what they're doing. Stick to it. Thank you.

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DR. ZIEMER: Thank you very much, John, for a very challenging discussion. Let's take a few minutes for some questions at this point, then we're going to take a break. We'll start with Roy here.

DR. DEHART: Thank you very much. It helps place us in context, and we appreciate that. mentioned consistency, and one of the battles I fight with myself is a legislative ruling which indicates inconsistency, and this is the Special Cohort area. And we have a Special Cohort of atomic workers who has a listing of presumption with cancer and there is no dose reconstruction. If they have the cancer, they're awarded a disability or an impairment or a financial award. And everybody else who may have worked in similar areas, these -- what I'm talking about is the gaseous diffusion plants -- the other areas, everybody else is having to go through a dose reconstruction. And there is repeatedly in the comments from the public this issue of inconsistency in the management of those cases. And I just wondered how you would deal with something like that.

DR. TILL: That's tough. That's tough. What

has generally happened over time, if you look at the history I think with the veterans, is that when we make a decision it's generally been in favor of the claimant. Is that good? I mean we've kept adding cancers to the presumptive list. Okay? I think we can go too far with I think -- I guess my answer is I think that. that may be a -- I don't know why the decision was made differently and I don't understand the legal aspects of this, okay?, but you have -- but I guess my answer is, you know, maybe that's a case for inconsistency. I don't know that you now say well, because you're doing this to a smaller group for some reason -- and you've got to look at why -- do you therefore go back and bring everybody else into that category. That's tough to say.

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I mean remember what you're doing, without that special case, has a good foundation. So -- so is that a reason to change your method? You really put me on the spot with that and I guess my answer would be stick with your plan. There are going to be cases for inconsistency. And I'm -- I can't deal with the law. Okay? You're going to let those guys deal with the law. I'm

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talking about consistency in the science, in our methods and in our assumptions. So you kind of threw me a curve on that one, but that would be my answer. Just recognize it exists and move forward. If Congress wants to change it, let them change it -- or whoever makes the law.

DR. ZIEMER: Gen?

DR. ROESSLER: John, you mentioned communication a number of times in your talk and you also said that -- of the veteran study -- there was a lousy job. We've learned a lot over time and I think you've learned a lot in the projects you've been involved with. And I think you know a little bit about what we're doing. We have the open meetings. We have -- NIOSH has a wonderful web site. I'm not sure people use web sites -- I'm sure they don't, and so that might be a problem. But what would you recommend to our group that we could do better in the way of communication?

DR. TILL: Well, certainly when we were working on the veteran work -- again, Mike and DTRA, I'm not trying to be critical of you guys -- but I think that's an area that we really fell down in. We didn't do that much with the

Academy. We opened our meetings, which is a huge step for the Academy in a lot of cases, but we also went to the NAAV meeting -- we went to one NAAV meeting. We invited the veterans to come in and talk to us. So to answer your question, Gen, I would be very aggressive about it. I would look for new ways -- what you want to do is establish a track record that says you've done this. Whether it's successful or not, you tried. Okay?

I'm assuming that you have workers come and talk to you, and I would try to do that regularly. Okay? Just so that it's on your agenda a lot. Okay? I would make an effort -- and I know you meet in a lot of different places. Make sure that you have a record of trying to go to the -- those exposed, as opposed to okay, we're going to meet in your city; if you want to come, come.

And I think, Gen, this is something I'm learning more and more about with communication, and I had always had this approach well, I'm a scientist and I don't have to do it. That's how I started. And then I shifted into the mode of well, I'm a scientist. You come in and you can

tell me what you think is wrong or how to do it better. That was my second phase of life. My third phase of life, which is now, is I'm going to the people and I'm making the effort to go to the people because a lot of people don't want to come to you. And that way you've got the track record of having done it. But I think you'll also be amazed at some of the things you'll hear and the concerns you'll get.

So the idea is just be very aggressive about this. Don't think it's sufficient to sit here as a committee, open your doors and say come and talk to us, we've got a public comment period. Try to do more.

Mary Lou Blasik*, who taught us a lot, Gen, I think would have been happy to hear me say that, but ten years ago I probably wouldn't have. Does that help? Does that help or is that not specific enough?

DR. ROESSLER: I know what you're getting at and I can think of specific things -- things that I don't think we're doing, but I wouldn't mind if you mentioned some specific things. I think that would help.

DR. TILL: Okay. Well, I assume you have a

newsletter -- do you? No? That's a good idea, and you put things in a newsletter like probability of causations, here's what it's going to take you, here's what we know about the science. Okay? A newsletter, I think, is a very good thing.

The web -- does the web do that, Larry, or not?

MR. ELLIOTT: It talks about it.

DR. TILL: I've seen your web site. Okay.

MR. ELLIOTT: We have brochures that we send with our letters to the claimants that speak to probability of causation and dose reconstruction.

DR. TILL: Okay.

MR. ELLIOTT: The web site also has topic pages on both of those areas.

DR. TILL: Okay. Well, I know that -- I know we're in the electronic age, but believe me, most people out there and most people who are filing claims with you don't look at the web, and they won't. They don't know how. So a newsletter's not a bad idea. And at some frequency where you really put substantive stuff in there that tells you what you're learning. Put out -- who -- how many people are getting awarded claims, what's

the percentage, so people understand.

And I still think when you go into a city, don't just have your meeting. Tell people you're willing to sit with them one-on-one, small groups, and -- you know, let's get together.

We'll get together for dinner, whatever, and talk about what we're doing. You will make more ground with a small group like that -- if you break up, in particular -- than you ever will asking people to come in and talk to you.

And what I'll do, Gen, if I think of more specifics, I'll tell you. But the web, too, is very important and this information going on the web, like a newsletter -- hard copy and web -- is good.

DR. ZIEMER: Mark?

MR. GRIFFON: Yeah, John, I had a couple of questions. One on the -- you mentioned participant statements, and I -- looking through the report quickly, I noticed that you had an opportunity in a lot of your reviews -- maybe not all of them, but the question is, were these participant statements part of the file or did your -- your board, in doing the review, elicit participant statements or how did those come to

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be in the file? That's the first question.

DR. TILL: Okay. We found far few statements -- fewer statements in the file than we would like to have seen. We think that was a serious mistake not to go to the veterans. There were forms, especially early on, where the veteran could check off and answer questions. information was information in the format of a letter. You'll see some in this report. they will absolutely amaze you at the detail these people could remember. I mean the detail. The best ones were probably in the files that the veterans gave us, 'cause we just didn't discover them in -- in our random search. Okay? But they were probably there if you went to the file. it wasn't that we went out and asked the veterans for the information. It was what we were looking for in the record, and there was not enough of And in a lot of cases, we felt the letters it. were ignored -- some cases. Not a lot, some.

MR. GRIFFON: Right. And just the other -the other question was you mentioned these four
broad criteria, which we've sort of adopted in
some form or fashion. I wondered, for your
committee, whether you developed procedures on

how you were going to evaluate against those criteria for consistency on your board. And in terms of -- I guess I'm looking at the nuts and bolts of this since our working group is constructing some of that and the approach you took to how to evaluate against whether the dose reconstruction was accurate. And if those procedures were developed, are they available to us?

DR. TILL: No, it's very interesting. The answer to that is that when we started the case reviews, when we finally got our first set of cases to look at, we did have a list of criteria that we were looking for. And I can't remember exactly, maybe seven, eight, ten specific things that -- I think we even formed a check sheet, you know, and gave grades. I think this is correct.

We gave up on it, because it was so difficult, the cases were so different, that we found that those criteria we thought were so wonderful, we never could apply to all the cases.

Now I think -- I think, Mark, in the back of our heads that we were keeping those things in mind. But the answer is we did not have some specific list of criteria that every time we got

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together we said let's go through these.

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On the other hand, I think what happened, what evolved from this, is that as we went through, you know, 50 or 60 cases, we were evolving into several key issues. And I remember a meeting -- you know, I mean I think that's just -- this is the way any committee would work. know, after you've looked at a lot of specific situations, you kind of involve to what you think are the key points, and then that's what came out of it. Does that answer your question? So I don't think what we did will help you.

UNIDENTIFIED: (Inaudible)

DR. TILL: Okay, sorry.

DR. ZIEMER: Wanda, you have a question?

MS. MUNN: First a comment rather than a question. Thank you so much, Dr. Till. I have not had an opportunity to -- like many of our claimants -- view what's on the web with respect to the Academy's forthcoming publication, so I'm looking forward to it eagerly.

Particularly want to thank you with regard to your comments relative to staying flexible in terms of changing science. I see a dilemma there, however, and the dilemma is when do you

decide to revisit this if the science changes and when not? I don't know whether your committee made any decisions in that regard or not. If they have, it would be beneficial I think for us to be aware of what they are.

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And there's a second item that I wonder about with regard to your experience. Clearly from the claims that we are seeing now, we have a larger number of claims that are being brought to us by families, by heirs, rather than by the individuals themselves. Therefore, first-hand information is not as easily available to us as perhaps it may have been in many of your cases. The claimants in those majority of cases express great frustration with the fact that they know very little about their loved ones' actual work place and what transpired, what their real experiences were. So we have a slightly different struggle in that regard in an attempt to try to reach a greater level of certainty regarding what might have been missed in that process.

I don't expect you to provide me any answer to that, but I really would like to hear what your experience was with regard to keeping up on

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the science.

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DR. TILL: With regard to the science, I don't think we recommended what should be done. We just recommended that this -- some policy be established to update -- or not update, but at least to recognize that the science is changing. Because I think there were some changes in the science, but it was sort of haphazard. wasn't a deliberateness. All right? And there also was no clear policy on if we change the science, what does it do to the previous calculations. And I think you need to address that. So I think you have to make your own decision about changes in the science. I think -- fortunately, hopefully -- what you are undertaking is a shorter term deal, because you're going after this pretty aggressively. You want to respond to these people quickly.

So I'm not sure how much the science is going to change in the five years or whatever time you're going to be here. But what if it does?

Okay? Maybe you don't want to change the science. Maybe you want to fix it in time so that everybody's treated the same. This is a policy decision I think you have to make. And

1 then if you change it, do you go back and make --2 and recalculate those doses for awards? I think my own personal opinion is that you wouldn't go 3 back and take anybody's claim away, but you might 4 5 go back and recalculate doses because it may 6 throw some people into a higher dose category and 7 entitle them to something. That is something we 8 pointed out in the report that somehow VA and 9 DTRA have to consider. So did I answer that okay for you? 10 11 MS. MUNN: Consequently, it would behoove us

MS. MUNN: Consequently, it would behoove us to be very cautious in the way we maintain our database so that we --

DR. TILL: Yeah.

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MS. MUNN: -- can pull only those cases that
are relevant.

DR. TILL: Oh, but I think it can be done. There's no question about it. I'm sure you're keeping a database that will allow you to do this. I am sure you can do this. I think it's strictly a policy of this Committee, strictly.

All right. The other question, though, there is an answer to the other question, I think, because we did have situation where widows were filing claims for veterans. I don't want to say

whether it was done well or not done well, but there is a way to address that and you go to the buddy system. You find some people who knew this individual and who had similar work style of this individual, and I think that's a perfectly legitimate, defensible way of coming up with a dose estimate. So it can be done. Yeah, okay.

DR. ZIEMER: Mike, let's make this the last question. We do need to provide a comfort break for people and there will be opportunities -- no, you give your question, right. Right.

MR. GIBSON: Thanks for being here today.

You mentioned consistency as being one of the important factors, and just to follow up on Dr.

DeHart's question, let's just say hypothetically a point in time came where people unknowingly got exposed to radiation and a time subsequent to that a law was passed. That's why they were put in the Special Exposure Cohort.

Now as we go on down the path, if we find a similar set of circumstances for another group of workers that fits all the criteria that put those workers at the gaseous diffusion plants in a Special Exposure Cohort, in your opinion, would that be consistent then for us to look at their

petition and consider putting them in the Special Cohort?

DR. TILL: You guys are really stretching my knowledge here today. If I were a member of the Committee, I would say that's fair and that's a part of my job that I would at least probe that. Okay? Because you're an advocate for -- some are you are advocate for the claimants and some of you are advocate for science or whatever. You're all here with a responsible position, and I think that's a part of your charge, yes. And then it's up to whether or not the law gets changed to invoke it, I guess. But yeah, I think that's why you're sitting here.

That's not what I meant by inconsistency, at all. I really was talking about science and methods and doing the math the same way and giving everybody the same benefit of the doubt.

This is getting in -- more into the law.

MR. GIBSON: Then -- that's what I was trying to do is leaving the legalese out of it and just say -- let's just say hypothetically, if one group meets the same criteria that the group met that was included when the law was passed, then when they bring that proof forward, it would be

1 consistent --2 DR. TILL: That's why you're here. MR. GIBSON: -- it would be consistent --3 4 DR. TILL: I think that's why you're here is 5 to look out for those things. 6 MR. GIBSON: Thank you. 7 DR. TILL: Paul, thank you very much. 8 DR. ZIEMER: Thank you, John --9 DR. TILL: It's very good to see you again. DR. ZIEMER: -- for being with us today and 10 11 if you're willing to stick around a little --12 DR. TILL: Yeah. 13 DR. ZIEMER: -- others may want to chat with you individually during the break. Thank you. 14 We'll take a 15-minute break. 15 16 (Whereupon, a recess was taken.) DR. ZIEMER: Before our next agenda item, 17 18 just a brief announcement. Larry? 19 MR. ELLIOTT: Just so you all know that at 20 your desk you'll -- or at your place here at the 21 table, you'll find the physician nomination 22 criteria that we have used in the appointment of 23 the 100-plus physicians for DOE. If you have any 24 questions about that or comments or concerns, 25 please let me or Dave Sundin know. We'll react

to those. Thanks.

DR. ZIEMER: Okay, thank you, Larry. Then our next agenda item is Jim Neton's report on the status of the technical basis documents. Jim.

STATUS OF TECHNICAL BASIS DOCUMENT/SITE PROFILE DEVELOPMENT

DR. NETON: Okay. Thank you, Dr. Ziemer.

This is a companion piece that goes with Dr.

Toohey's talk this morning and will tend to

describe to you some of the more inner details

and workings of how these technical basis

documents are put together. Since some of the

stuff was gone over briefly by Dr. Toohey this

morning, I probably won't take the full hour that

I was allotted, which you're probably glad about

since it's nearing the lunch hour, so I should be

able to probably get through this fairly quickly.

We recognized early on that we needed a number of these site profiles. In fact, we need essentially one for every site, at least the major DOE sites, to be able to do our job of dose reconstruction. These serve sort of as a road map, I like to call them, as to how you do a dose reconstruction for a particular site. And by their very nature, they're limited in scope.

They're not epidemiologic reviews. They're not how-to guides for the dose reconstructor or detailed responses to how you treat it, but really it's just a summary used by the dose reconstructor to provide him site-specific information.

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For example, if a claimant has worked in 1950, 1955 time frame, one should be able to find some detail in that road map as to what detection limits were for the badges that were worn, the number of times it was exchanged on a -- how frequently the badge was exchanged, that type of It helps to minimize interpretation information. of data because I think as you saw this morning, we have -- I was surprised actually the number's up to 300 people working on this project. These dose reconstructors, by design, are distributed around the country. It's the only way we could get a critical mass of people sufficient to complete these in a timely manner. So many of them are working independently, without benefit of interchange -- you know, sort of office chatter. So it helps to minimize interpretation of the date to ensure what we heard earlier is consistency among these dose reconstructions.

Again, it's used basically as a handbook.

when it comes out, is not the end of it. As

information is obtained further through either

And these are dynamic documents. Rev. zero,

site searches or from claimants, these things

will be amended as we go.

Okay, a little bit about the definition. I know there's confusion along the -- the audience and possibly the Board as to what we mean by a site profile. It really is a compilation of individual technical basis documents which covers the five bullet items here -- facility/processes, environmental dose, external dose, internal dose, diagnostic X-ray information. So it's a series of chapters that describe in some detail each of these type of areas that are needed to do a dose reconstruction.

Each section is intended to be a stand-alone document, so we can develop these as we go. The idea was that we wouldn't have to wait for the entire site profile to be done to start moving some claims forward. We're trying to -- always looking toward optimizing the process and maximizing our efficiency. So for example, if we had a worker who was only -- who had only worked

exterior to the plant and had been exposed to environmental dose, if the environmental dose reports were available and we could reconstruct their exposure, then we could do so without the benefit of having to, you know, flesh out all the internal dosimetry and external dosimetry information.

I think we've talked about this enough at a number of Board meetings, but there is a certain hierarchy of data that are used to do these dose reconstructions. Starting at the very top with personal dosimetry and moving all the way down through the bottom to source term and radiation control limits, I think this is well-known by the Board. We don't really need to go over these. But this is just up there to illustrate that the site profiles tend to try to be true to that concept so that they do follow, you know, what was intended when the rule was written.

Okay, a little bit about timing of these documents. This is a generic chart -- by the way, I would like to acknowledge the help from our contractor, ORAU, Dick Toohey and Judson Kenoyer for helping put some of these slides together. But this is a generic time line for

how long it takes to get a site profile together. As you can see, it ranges out to about 16 weeks. Some can be shorter, some can be longer, really depends on the site. But in general, there's some steps in here -- to review the available data, and then to see if you have an update or request additional information. That may require going back to the site, talking to site contacts, conference calls, any -- any way that we can get information. In fact, sometimes looking through the claimant files we've actually found some leads of what the claimants have submitted with their files to flesh out these dose -- these site profiles a little better.

So given that these things can take a while, up to three, four months to complete, the decision was made a while ago that we would do these in parallel. And as you heard Dr. Toohey talk about earlier, there are 12 or 13 individual teams out there right now working on these things so that they can complete it and move the dose reconstructions for those sites forward.

A little bit about the process. It's a fairly formalized process to get these things out the door. These are issued as controlled

documents, but what you see on the left-hand side is the informal process. And what I mentioned a little bit this morning during the discussion of Dr. Toohey's presentation is we actually have a NIOSH health physicist assigned on the dose re-on the technical basis document or site profile team, so that all along there is sort of this informal review process going on of the document so there are no surprises. You know, we didn't feel it was worth waiting three months, ORAU would develop this document and we'd say no, you know, that just doesn't really seem right to us. So in this informal process, NIOSH is involved in resolving comments before it ever comes over here for the official review.

These things are officially commented on, once it comes over, by us. We provide written comments. ORAU is required to respond. We have what we call critical review comments and non-critical review comments. If it's critical review, it must be addressed. So in that review process it's an iterative process that occurs where comments are considered, reviewed, and we come to some consensus opinion as to how we're going to proceed.

Once the document is completed with a NIOSH official review, it goes into our document control process. Well, this is an ORAU document. It goes into their document control process, but it is signed both by NIOSH, that would be Dr. Toohey and myself as the authorizer for the document to be released for use. It has a revision date and a revision number, and we will always keep track of the revs. as we go so we know which dose reconstructions were done with which revs. of the technical basis documents.

Okay. What kind of resources do we use to put these things together? And it comes from just about any source, any source that we can get reliable -- probably the best resources that we have are some of these site technical basis documents that the DOE sites themselves put together. As DOE rad. control programs matured in I guess probably the early to mid-1980s, technical basis documents were required for the external/internal programs. And these things not only tend to document what's currently being done, but also usually have some sort of historical discussion at the beginning, and it's a good starting point for us to branch out and to

obtain additional information.

Also useful are safety analysis reports that were completed for certain projects 'cause those tend to be all-encompassing, talking about process descriptions, potential radiation exposure environments, that type of information.

Work place environmental reports are very useful. It's somewhat different than the site environmental reports where you're talking about fence-line dose. We really are not interested in the dose at the fence-line. We're of course interested in the dose to the workers who were either in buildings or around buildings. So where we can find those reports, they're used.

And facility data, which would be the area monitoring results -- air samples, surface smears, survey swipes, those type of pieces of data, if we can obtain them -- internal memos, correspondence sometimes are useful. Any publication, particularly peer review publications that may be available, we obtain. Most recently there's a very good publication regarding the solubility class of materials at the Y-12 facility that we've tried to use and incorporate into some of our documents. Previous

dose reconstruction reports, whether they were done hand-crafted basis by the supplemental team or dose reconstructions that have been done -- for instance, at the Mound site -- we would use as a starting point. We wouldn't use them necessarily, but we would evaluate them to see how applicable they may be to our situation.

And I mentioned previously, sometimes information submitted to NIOSH by claimants in particular has been beneficial. That was the case for the Bethlehem Steel technical basis document. A claimant had some pretty rich sets of data in there that led us to other sets of data and helped us develop that document.

And there's other things here, other site reports, web sites, conference calls, contacts and visits. So anywhere we can get the information is basically it.

Okay. The parameters of interest, as we discussed earlier, medical X-ray dose is one of the sections. Occupational dose for unmonitored workers, which is a somewhat unique situation. I mean if you've monitored, then we can flesh out your dose a little bit by looking at the missed dose for the monitoring program itself. But if

you're unmonitored, it's not that straightforward to figuring out what the potential dose could have been, and we'll talk about a little bit of these as we go. Occupational internal dose for monitored workers, and then occupational external dose for monitored individuals. So these are the areas that the site profile attempts to address.

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Medical X-ray dose is addressed by year. course the X-ray monitoring technology has changed dramatically since the early '50s, so we need to know what year the X-ray was taken and we can try to determine what the dose may have been by the type of the machine or the technique used at the time. Dr. Toohey mentioned earlier about this photofluorographic technique that was used in the '50s. That's probably the extreme example, but those doses can be very large. Ιn some cases we've noticed at the Savannah River Site that the columnation* was wide open so that all of the organs or most of the organs may have been exposed versus just the narrow field of view of the lung, which was the subject of interest of the X-ray. So all these things are taken into account and attempted to -- we attempt to address them in the site profile.

By organ, of course, if it's a columnated*

field and one's taking an AP chest X-ray, then

the dose to the bladder is going to be somewhat

less than the dose directly delivered to the

lung, or typically the entrance skin exposure,

which is usually what's quoted for an X-ray

machine. And there is some attempt, to the

extent possible, to address uncertainties.

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Okay. Occupational dose for unmonitored workers, we'll first talk about internal dose. If a person was not monitored for internal exposure -- you have no record of any bioassay sample, no whole-body count, no urine sample, no breath analysis, anything of that nature -- it becomes a little bit tricky to figure out what the upper limit of the person's exposure could have been. So we attempt to address that by looking at the inhalation based on air monitoring. If the air monitoring data are readily available -- that is, they're not in the plants in 100 boxes distributed about there -about the plant, you know, they're fairly consolidated -- I think the situation exists for the Fernald site; we have some pretty good air monitoring data -- that would be described in the

technical basis document and how that could be 1 2

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used to assign some bracketing exposures for a worker who was unmonitored for internal exposure.

If the information's not available -- or readily available, and by readily I mean it wouldn't be a million-dollar research project to go retrieve these records and code them and that sort of thing, we would have to default to the source term analysis, which would be what type of material was used at the site, what was the process -- grinding, welding, that sort of -were performed on the -- at that facility. in certain circumstances, even if you know the source term, we would use claimant-favorable assumptions. For example, if we didn't know -if the person -- if the source term indicated that there was a machine that would convert billets into rods or something of that sort of thing, and we didn't know where the person worked relative to that instrument or machine, we would use claimant-favorable assumptions and assume they spent the majority of their time working near that machine.

Internal exposure for outside facilities, if a person is not in the facility where the

equipment is being used to generate airborne radioactivity, then we have a little bit more of a problem. We have to know something about the site ambient radionuclide activities, and that takes a little bit of work. But as we talk about -- I'll talk about shortly in the environmental dose reconstruction area, there's some things we can do there, and I think I have an example in the Savannah River technical basis document.

Occupational dose for unmonitored workers in the external area is also addressed in the document. If the exposure probability is low, we can use some sort of reasonable background dose - maximum background dose that we can determine, whether it's based on area that was out there or if we had examples of what coworkers -- they wouldn't necessarily be representative coworkers, but maximum coworkers, people who were probably exposed to higher levels, we could use that.

If the exposure probability is high, we would use coworker data or claimant-favorable assumptions. Again if -- an example of a security guard who was not monitored who maybe took -- you know, made a round through the facility. If we knew what the maximum dose was

to any worker in each of the facilities that the security guard visited, and we knew the amount of time it would take to do the rounds through his run, we could come up with some bracketing doses for that particular person in the external area.

The document also, though, addresses the release of any noble gases -- sometimes submersion in a cloud of noble gas from an external perspective, whether it's xenon or krypton gas -- needs to be taken into consideration. And of course, like all other forms of exposure, uncertainties in the external dose calculation is attempted -- we attempt to address that in the technical basis document.

Occupational internal dose is probably the most difficult thing to reconstruct. And as Dr. Toohey mentioned earlier, these things are difficult to decipher. You get bioassay cards that are 50 years old with cryptic notations. Sometimes you get results that don't have units of measurement, you just get a number -- five, four -- I mean you really don't know. A lot of research needs to go into determining what that really means and deciphering these codes. You know, I've seen cards -- as Dr. Toohey mentioned,

A, B, C, D, or 1, 2, 3, 4. Sometimes they use special notations for radioactive materials.

Uranium was not always called uranium. I mean they had special notations -- for security reasons, I suspect -- back in the early days for the types of materials that were -- that workers were being exposed to.

The method of analysis needs to be taken into consideration, whether it was a fluorometric technique or whether it was a gas flow proportional count or measure -- alpha measurement of a deposit urine sample on a plant check -- all needs to be taken into account. And wherever there's a question, the technical basis document will, again, err on the side of being favorable to the claimant.

We've got some examples. For example, at the Y-12 facility the detection limit appears to have been listed as 40 disintegrations per minute for an alpha measurement in urine in the 9150/60 time frame. That's a pretty high detection limit. We suspect that it's much better than that, but we cannot find any evidence that there's a statistical analysis that demonstrates it's any better than that, so that's what the technical

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basis document indicates that we should use.

And again in the occupational internal area, source term information by facility and process. You know, what were the nuclides that were at the site, where were they, during what time frame and what was being done with them. I mean that's probably some of the more important types of information to be described, if there were no monitoring data available for the workers.

And again, uncertainty in the internal world. That's probably the most difficult thing to put an uncertainty on. As Dr. Till mentioned earlier, the ICRP has never come out with a concrete statement as to what the uncertainties are associated with internal dose. And we're actually wrestling with that a bit right now. Ι think we're getting close to putting some brackets on it, but it's been the subject of some discussion among our health physicists.

If you're monitored and you had a Okay. badge, you know, you need to be able to interpret that badge, so the site profile's going to have the type of radiation energy -- the range of the energies for photons and neutrons. You know, as some of you are aware, we need to know the energy

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interval that you were exposed to for -- whether photons or neutrons, because that will have a direct result or effect on your probability of causation calculation. By labor category, if we know that, we'll tend to describe that in the document, and exposure geometry's pretty important. Whether, you know, you were facing the reactor shield wall or whether you were working in a rotational geometry, all those factors we try to put in the document so that the professional judgments exercised by the health physicist in doing the dose reconstruction are somewhat consistent.

Dose correction factors, we've heard talks about those before, but those are in there. You know, how we convert a dose that's measured on the badge to a dose to the prostate or to the bladder, that sort of thing.

Handling of missed dose, you know, the detection limits are in there, the badge exchange frequencies. Dosimeter correction factors, sometimes the dosimeters couldn't measure what they intended to measure -- 17 keV photons at Hanford in the early days comes to mind. One needs to know what to do with that, and how does

one assign a dose to a worker? Well, hopefully, you know, we're including that in there and -- as is proper. Neutron dosimetry is another problem area that we tend to flesh out in these documents.

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And again, putting the uncertainty with the dose is -- to the extent possible, is included in these documents.

Well, I mentioned that we're trying to do these in parallel and get these out as fast as possible. This slide is valid as of July 14th, so it's changed somewhat, but these are the top 11 DOE sites and the number of claims from those sites. And you see the bottom line is that if we develop site profiles for 11 DOE sites, we theoretically could produce dose reconstructions -- or at least initiate them -- for over 10,000 claimants. So you know, it's not as daunting maybe as it sounds. I mean we can do 10,000 with 11 site profiles, that's a pretty good number. It doesn't address the other ones yet, but nonetheless, if we can get these documents out in a short order, we could start moving these forward.

One of the ones that we -- we've completed an

AWE site profile for Blockson Chemical, which -not Blockson Chemical, Bethlehem Steel, which the
Board heard about a couple of meetings ago.

Savannah River Site is the first DOE site profile that's been completed, as of July 15th. It's out there on our web site, as we discussed. It covers operations from 1952 to the present at 29 separate facilities, all the major facilities on-site are addressed in some way, shape or form. It's a fairly comprehensive document. Rev. zero came out at 188 pages. It's very technically detailed. It was not written from a layman's perspective, although there is an executive summary that is fairly readable.

Just a few of the highlights. It does cover environmental dose on about any location on-site, which was based on an adaptation of the CDC studies of effluent releases by Dr. Till's organization when they did the Savannah River Site dose reconstruction. It's a little different. You know, off-site -- fence-line and off-site dose was reconstructed by Radiation -- or Dr. Till's organization. We actually had to adapt those releases and move in and do some local area doses, based on their previous work.

There was a discussion on that at the health physics meeting in San Diego, if any of you saw, I thought it was pretty impressive.

The document does describe photon/neutron energy distributions and ratios by areas for all those facilities over the entire operating history of the plant. I guess I should be a little clearer than that, though. There are a few gaps. I mean we decided that we were not going to have these things -- we're not going to wait till every piece of information was complete to move it out. But the idea was that where there are some gaps in information that are missing, we've identified in there and go back and put it in later. So there are a few areas that are maybe not covered at this point, but we'll add them as we can.

And from the internal dosimetry perspective, there's some documentation that contains the isotopic activity fraction by area, what isotopes were present, at which areas and when.

Just to give you a flavor, this is a controlled document. This is the cover page of the Savannah River site profile document. Again, it is written by ORAU and signed by the task

manager for the project and then Dick Toohey and
I are involved in the approval process, once both
of our health physics staff have reviewed them.

You'll see that we do have -- there's an executive summary that I think is fairly readable. Then the rest of the document consists of, as you see, Chapter 2, occupational medical dose, occupational environmental dose, internal dose and external dose. So it's a pretty good compendium, I think, of what happened radiologically -- occupational radiologically at the Savannah River Site over time. And then there's a number of appendixes that are there that discuss things like facilities, processes and that sort of thing.

These are controlled documents, as I mentioned. Once they're issued, you know, they're maintained. Only -- you know, the dose reconstructor should only be working with the latest revision of the controlled document, so when ORAU distributes it, they make sure that, you know, that document is in effect in the field. And if it changes -- for example, we're -- I think revision one is being worked on currently for the Savannah River technical basis

document. It's going to add another 50 pages of data to help interpret internal doses. When rev. 1 comes out, then all dose reconstructors will be made aware that, you know, as of this date, that is the document that should be used to perform dose reconstructions.

This is just a listing of the DOE site profiles that are currently being developed, and the contractor or subcontractor that's working on them at this time, and the lead person who is assigned to that dose reconstruction. Not shown on here is the lead NIOSH person who works with the lead ORAU person in getting these things completed. But you can see that we've got all these facilities covered. They're going in parallel as we speak, so we will cover whatever I showed on that first slide, something in excess of 10,000 DOE claims -- DOE site claims could be processed -- or at least initiated, given this.

The AWE sites are a smaller percentage of our claims, I forgot what the statistic was, but 12 or 14 percent, something thereabouts. And so this represents the number of claims from the top ten Atomic Weapons Employer sites. You can see the number totals about 1,200 or so. So you

know, not a tremendous number of claimants, but that doesn't mean of course they're not important to the individual claimant. They're just as important as a DOE site. So we do have -- or ORAU actually has in process a number of these AWE sites right now. Bethlehem Steel of course is done, so we have moved the majority of the Bethlehem Steel claims through the process.

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I think Dr. Toohey mentioned earlier Blockson Chemical is in our hands for review, as well as Huntington Pilot Plant. The other ones are in various states of assemblage. They are trying to take advantage of the process where these -- most of the AWEs were uranium facilities and they did sort of limited scope work, whether it was, you know, making rods or producing uranium product, uranium metal drums. They tend to fall into similar categories, although they're not exactly the same. One has to be careful about the level of plutonium contamination that may be present in the urine, or uranium, at the time the facility was producing, the degree of enrichment, those types of things need to be considered. think there can be sort of a skeleton approach, and then we can work out the details as to the

other factors that may contribute to the claimant's dose.

This is a listing of currently the four AWE sites that are under development, or one's done and three more under development. And then just a little slide showing the sites that are similar to Blockson, that we feel we can use a similar approach to dose reconstruction, and the sites that we believe had similar operations to Bethlehem Steel. So between the 10,000 DOE site -- DOE claims and the 1,200 or so AWE claims, we've got a good percentage of the claims covered.

The good part of the story is these cover that many claims, but then what Dr. Toohey talked about earlier with the efficiency process is also going to add some more claimants where we feel we can move people through without actually having a technical basis document or site profile. So we've got the vast majority of the claims covered with these things, although there's always going to be these few that are going to be problematic for us.

And I think that's the last slide, if I'm not mistaken. Yeah. Well, I think I've kept us on

reasonable time for the lunch hour. If there's any questions --

DR. ZIEMER: Yeah, thank you, Jim, I think we do have a little time for questions if we have any.

Jim Melius.

DR. MELIUS: Just to back up a little bit, if I recall correctly, the original plan was that these site profiles would be done sort of sequentially, not as a group like this. And that they would sort of be built up from the individual dose reconstructions and the information and they would gradually come into play. So I think that -- is that correct or -- I mean this -- is this a change in plan? I'm just trying to get a handle on --

DR. NETON: Well, partially correct. I think the concept of doing them sequentially was in the plan, although we thought we might do a few at a time, but with -- to step them up and to get them all done in parallel is somewhat of a change in direction. But you see we've added staff to do that and we believe we need to do it to get the numbers out the door.

To base them on the dose reconstruction and

the worker profiles, I think is what you're alluding to, was really not the idea. The idea was to have the site profiles in place so that we could move claims, process claims, and as we got experience with exposures from those workers who were being processed using the site profiles, we could start populating these worker databases or worker profile databases. And in fact, we're meeting next week with ORAU programmers to help establish the overview of that database. put some stuff in there, but we feel we have to have a road map, you know, to get these things completed. Until you get a number of dose reconstructions out the door and the data are

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Until you get a number of dose reconstructions out the door and the data are keyed in and entered, we can't really start doing the worker profiles.

DR. MELIUS: But -- you can't start --

DR. NETON: We can't establish worker profile databases until we do dose reconstructions.

DR. MELIUS: Oh, okay, I understand now.
Okay. Okay. I understand.

So then -- just so I understand then, these site profiles are sort of a technical resource document for the people doing individual dose

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reconstructions, and then they will allow you to -- based on that, to complete your individual dose reconstruc-- to complete all the Y-12...

DR. NETON: That's the plan, although I have to put a little bit of a proviso on there. There may be some dose reconstructions that can't be done even though the site profile is there. mean you've got all the information, but if the person -- it may be more difficult to do -- you may need more information than what's in the site profile, let's put it that way. The person may have had some very unusual incident that they were involved with that we need to -- that might not be in here. I mean this sort of covers the standard operations at the facility and the standard work practices. But if there's some unusual circumstance, it may take a little longer and a little more investigation to complete a claim.

DR. MELIUS: And presumably also that once the SEC reg comes out that that will -- you know, there may be some numbers of people for whom a individual dose reconstruction cannot be completed.

DR. NETON: That's always a possibility.

DR. MELIUS: Yeah, and fall into -- to that.
Okay.

Secondly I'd like to ask you about how the information's being gathered for these? It seems to me that it's -- appears to be, given the time frame involved, mostly a what's available in terms of summary reports. Is that true or -- I don't -- I haven't had a chance to read in detail the Savannah River -- but it appears to be mainly a paper collecting --

DR. NETON: Much of it's a paper review. We have literally -- I'm not exaggerating when I think I say tens of thousands of pages of information in our database. But there are site contacts or site conference calls set up with current people at the facility to discuss -- I know for Savannah River this is true. You know, we had numerous discussions with them related to their processes and that sort of thing. So it's not merely a paper study, but it is primarily based on paper -- paper data capture.

DR. MELIUS: Were any labor representatives included in any of those -- that outreach effort?

DR. NETON: Not to my knowledge, no.

DR. MELIUS: Is there any plan to do that in

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the other -- all the many others that you have underway?

DR. NETON: No formal plans at this point, but certainly if labor representatives had information that were useful, we would -- we would consider it.

pr. Melius: Well, it seems to me that from your slide you were saying that you'd consider information other people submitted, but it's a passive process, so -- I guess I'm trying to understand how -- how these -- how people get into it, into this process. It seems to me it's a very closed process. You have only an internal review, though I -- I'm curious about this health physics society review of the document that you mentioned. But before -- talk about that, what -- I mean -- it's a closed process. True? I mean it's --

DR. NETON: I think --

DR. MELIUS: -- between NIOSH and ORAU and
this -- you know, these contractors that you've ORAU's hired to do this.

DR. NETON: Yeah, I don't think I'd characterize it as a closed process, but it is a process that typically does involve health

physicists who are knowledgeable about the exposure conditions at the facility. And it is true that we have not gone out and solicited labor's input on these documents.

DR. MELIUS: Do you think there might be some value in soliciting input from not only labor unions, but other people that are familiar with the site that -- you know, retired technical people, other people around a site that might be -- provide useful information --

DR. NETON: Oh, yeah, I --

DR. MELIUS: -- particularly in what's not
available or what might not be readily available?

DR. NETON: I think that's useful. I think we're -- it's a balancing act, you know, getting these things completed and -- and using them.

But they're dynamic documents, as well. And as we have time to do that, I think it's a reasonable -- reasonable idea.

pr. MELIUS: So it's going to depend on when
you have time to -- I'm just trying to understand
the process. I don't --

MR. ELLIOTT: If I could add a comment here, Bethlehem Steel we did use information that was contributed by a worker.

DR. NETON: A claimant.

MR. ELLIOTT: A claimant. So it's not -- you know, it's not fair to say that we don't accept that and use it. We do. Jim mentioned that earlier. Savannah River Site is not -- does not have an organized labor group, per se, there. They're largely unorganized in their work force, but we did not take advantage of the opportunity to seek or solicit information from anyone other than the people Jim's mentioned at that site.

However, once these documents are on the web site or available to the public, we certainly welcome any kind of comment or input that could be garnered from those that we didn't touch.

there's nothing I saw in the beginning of the document -- maybe it's buried on page 150 -- that indicates you're soliciting input or interested in input nor did I see it when it was posted on the web site. It was post-- put up on the web site as a completed document. In fact with this -- I happen to know what a controlled document is from my old bureaucratic days, but -- in the government, but to me it looks like a very official, final document and there's really no --

not even a hint that you're looking for input into that. And I think that needs to be corrected. I'd also like to add -- and again, I haven't read Savannah River, but are there -- is there any information in the document that indicates what the sources of information were, particularly the individuals that were talked to? You talked about some conference calls or some attempt to reach out to the...

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DR. NETON: Yes, I think that -- well, where there are cital (sic) references, they're certainly in there. I'd have to defer to Judson Kenoyer on whether -- I forgot whether we've cited contact information.

MR. KENOYER: I know in the original --

DR. ZIEMER: Judson, you may need to use the mike here, please.

MR. KENOYER: I'd have to check on the final document as it was printed, but I know in the original draft we referenced specific conversations with people on site.

DR. NETON: I was pretty sure we did, but I wanted to make sure.

MR. KENOYER: Some of the most valuable

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information we retrieve is from the direct interaction with people that worked on-site in the early years. Certainly that's our biggest challenge, to get data describing -- or information describing the systems that were used in the early years. And we've gone to more and more interviews, face-to-face interactions with people that have since retired but are still around.

One example is this week we are interviewing Jan P. Lawrence at Los Alamos, a key individual in the external and internal dosimetry programs.

DR. MELIUS: I guess what I'm concerned about is that people don't know you're doing the document, don't have any information on the process or what's going on, how do they know to even contact you or how do you know to contact them? It's a very sort of hit and miss and I agree, we're not going to find everybody that has -- may have valuable information and you may have people that end up with not very valuable information. But if there's no attempt for outreach or -- of this and -- and I think that goes through -- right through from the start of the document. Again, okay, these are dynamic

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documents. Why not make it -- tell people, announce to people, get the information out that you are soliciting further contributions to this -- terms of information and -- and so forth. And I don't know whether that's best -- you know, at what step in the process it's best done. I'm concerned when you're rushing through something in, you know, three or four months, it doesn't leave much time. And albeit there is -- you need to get the program going, but that ought to be balanced by how good and comprehensive the information -- how complete the information is so we don't make mistakes and leave out valuable information that was -- you know, might have changed somebody's dose reconstruction. think some more active outreach would be useful for that purpose.

DR. NETON: I think you make a good point and we certainly will consider that. But I will say that, you know, we would not release the document unless we were very confident that we had captured the essence of the exposure profile of the site. But if information did come to light, we are committed to going back and re-evaluating the claims that were processed, with that new

information, to make sure that someone was not inappropriately, you know, characterized for their exposure.

DR. MELIUS: Yeah, I'm not trying to characterize your intent or whatever. I think your intentions are good. But I think we have a whole history of review documents being put out about these sites that are -- been less than complete, with a lot of missing information. So I think having a public process to this and an active outreach would be very helpful.

I'm also a little concerned about -- I

presume there's no external peer review, and I

think that's something that might be considered

as, again, a way of soliciting both technical

input in terms of what you're doing, as well as,

you know, soliciting more information from

people. You know, maybe we've used up all the

available health physicists and maybe peer review

would be hard to do, but -- I guess I was struck

by the fact that you went to the health physics

society, you mentioned that you had lively

debate. I don't know what that means, but that
I assume it means you got some input in terms

of at least that particular calculation that you

had done. And again, I don't know whether Dr. Till's group or Dr. Till was contacted about what you -- or you know, solicited about the way you were using the original data and they with-- you know, maybe some ideas they might have, but it seems to me that there's some value to a scientific peer input into this process at some point. DR. NETON: Well, at some point we have to

DR. NETON: Well, at some point we have to draw the line. I mean we are hiring a contractor to do nothing but review these technical basis documents in probably three months from now. So to layer review upon review does sort of impede the progress. But your point's well taken.

DR. MELIUS: If they're -- living documents.

I was also -- my understanding was there was a number of health physics society presentations that were made by --

DR. NETON: Yes.

DR. MELIUS: -- the NIOSH staff. Are those available at all to those of us who didn't get a chance to go to wherever?

DR. NETON: I don't believe they're on our web site, although we can certainly do that and make them -- are they out there, Dick?

DR. TOOHEY: Let me just comment -- the ones that were made by ORAU staff I think are on the ORAU COC* web page. I know mine is. It's certainly our intent to post them out there.

DR. NETON: We'll make sure that we put all those on our OCAS web site for public viewing.

DR. ZIEMER: I might add, Jim, that the health physics society doesn't publish proceedings of their meeting, but they do publish the abstracts of each of those papers. They are basically individual submissions, and I don't think the -- this was not a formal review by the health physics society.

DR. NETON: No.

DR. ZIEMER: What you had was discussion at
an open meeting --

DR. NETON: Exactly.

DR. ZIEMER: -- when a paper was presented.

DR. MELIUS: Yeah, but -- yeah, I understand.

I understand. I just think -- thought I was
making the point that such a discussion is
valuable, as would additional peer review and
additional input into this process.

Finally I'd like to just go back to at least this whole issue of conflict of interest and

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transparency of the process. I think all of these things we've been talking about, the questions I mentioned, are critical to the credibility of this process. You're going to be basing a lot on these documents, and that albeit there's, you know, individual dose reconstruction that'll go on and opportunity to question issues and provide more information, but a lot of what you do and a lot of the credibility of this process is going to be dependent on the -- these documents. And to have them done by -- without people knowing who's involved and this whole issue of potential conflict of interest, I think is a serious mistake to be made, and I think it'll cause serious issue-- serious questions to be raised about the credibility of the whole process, particularly if the wrong information, wrong people are involved, or misinformation gets out in a very selective way about who's involved and then why has this been kept secret. really think you need to seriously consider how you open up this whole process, including the -how you solicit information, how you get the review done, how you continue to solicit input, as well as the transparency for the people

involved in the process.

DR. NETON: Okay.

DR. ZIEMER: Thank you, Jim. Gen and then Mark, and then we need to break for lunch. We can return to this if there's others that want to comment.

DR. ROESSLER: My question is about radon doses. I assume some of these facilities do have enhanced radon. How are you getting the information to calculate those radon doses and how are you taking into account what the non-work place radon might have been, which to me should not be a part of the radon dose attributed to the work place.

DR. NETON: Right. Well, there are radon monitoring data for a number of facilities. I know Fernald has some -- minimal data, but at least we know what -- what the upper limits were in some facilities. I know Mallinckrodt has some radon monitoring data. So to what -- to the extent it's available, we'll use it to model what the exposures were. I suspect if we didn't have any radon information and we knew how much radium was there, we could sort of back-calculate based on emanation rate and equilibrium situation, what

could have been there at the upper limit. So we do intend to use it. It's included in the technical basis document if it's occupationally-derived.

The trick is, I think -- you know, your second part of your question, which is what -- what portion of the radon exposure at these facilities is occupationally-derived. And in fact, we're still wrestling with that concept. There are some areas where there are tunnels that were drilled into the ground to do testing of weapons. That's not technologically-enhanced radon, but it is a tunnel, and is that an occupational exposure or not. We are currently formulating a policy on that position.

MR. GRIFFON: Just a quick one maybe, and maybe if we need to we can continue after lunch or whatever. But I'm seeing a new parenthetical phrase in some of those overheads -- at least new from my memory on some of your previous presentations. "If readily available" keeps cropping into many of these overheads now.

DR. NETON: Yeah.

MR. GRIFFON: And I'm wondering if you can define for us -- sort of like sufficient

accuracy, you know. Can you define "readily available"?

DR. NETON: I can attempt to. The idea there is that, you know, we have to produce these in a reasonable time frame. And if the information are somewhat consolidated and available, either electronically or in one room as paper records, we would consider using them in the technical basis document themselves. But if the information, as I mentioned, is distributed about the site and available in 300 facilities that are contaminated facilities, we just don't feel at this point that it's beneficial to hold up the technical basis document to retrieve all those records.

Now as far as a dollar figure or time frame, we really haven't established that. Fortunately these things seem to sort of be dichotomous. They either have an electronic database or they don't, and the records are not retrievable. So we haven't had to really define what -- you know, what that cut point is.

MR. GRIFFON: And is that something -- for instance, if you identify a set of records that may not be easily retrievable, where -- where is

So they

the responsibility drawn for -- for collecting those rec-- does DOE have a role in this collection process? DR. NETON: DOE has a role --I'm sure they might want to be MR. GRIFFON: reimbursed for their efforts or -- or --DR. NETON: Right. How does that work? MR. GRIFFON: DR. NETON: DOE has a role in making those records available for us to capture. would consolidate them to a certain point, but then we would go to the site and do a data -what we call a data capture effort, which is to scan all the records, if possible, and obtain images of those records.

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MR. GRIFFON: I guess --

DR. NETON: Judson might have a slight correction there, but I think that's fairly accurate.

MR. KENOYER: That is accurate. What I'd like to do is add to that, though. Remember we talked about these being dynamic documents. Readily available really fits into the rev. zero zero, because we're continuing the efforts to search out additional data.

DR. NETON: Yeah.

MR. KENOYER: Good example would be data on Mallinckrodt. I know that there's some up in DOE headquarters, but they're mixed in with classified information. It's just going to take time to retrieve it. We'll produce rev. zero zero of the Mallinckrodt TBD, but we'll pursue getting the other data and if it changes the TBD, we'll -- that'll be in rev. zero one.

MR. GRIFFON: I guess, you know, just referring back to some of what Jim said, you know, some of the concerns early on in this program that have been expressed is that past reports and past DOE databases may -- may be at least suspect or -- and part of the reason for this independent effort would be that we, at the very least, cross-reference or validate or verify, if we're going to use those numbers for determinations. And I guess some of what I -- at least in this rev. zero of Savannah River, I noticed that air monitoring --

DR. NETON: Was not readily available.

MR. GRIFFON: -- was basically skipped over.

I mean it seems that a lot of the records are
going to be difficult to get to, if in fact you

do attempt to get them. But I would argue that - at least at some quality control level -- it
would be a valuable exercise to verify the
bioassay records.

DR. NETON: Oh, yeah, we certainly intend to do that. I mean we'll go back and, as the information becomes available, bounce it against our TBD.

Let me say, though, one point -- it's been my experience that when we -- if we construct a technical basis document and we are lacking information, we are claimant-favorable in our approach. And at least in two instances now, I know as additional data became available, it would tend to reduce the doses or our estimated exposures to the claimants rather than increase them. So it's -- they tend to be more claimant-favorable the less data you have.

MR. GRIFFON: Last pre-lunch question. If -you know, I guess some of my concerns are -- and
you've heard these before -- is the notion of
missing the trees for the forest, and the fact
that -- this goes back to the question of
unmonitored workers, and you say when you don't
have other records, you may rely on source term

data. When you define source term data, I would imagine that this level, especially in rev. zero, you're talking about building -- a building, or as -- or -- or -- well, I -- well, I don't know, but the question is, you know, at least my experience is that sometimes within processes you find different concentrations, different accumulations of radionuclides so your source term can vary over a process and over time and how --

DR. NETON: Right.

MR. GRIFFON: -- how do you define, you
know...

DR. NETON: Well, but I think, again, you'd see that if we did -- if you did a dose reconstruction based on source term data, it would tend to be very claimant-favorable. If we didn't know that the person worked near -- we would come up with a maximum exposure scenario, essentially, given that source term. And essentially, if we couldn't prove otherwise, assign it to the claimant and use that for --

MR. GRIFFON: Yeah, my example -- being very specific, if you assign a maximum, you know, for some of the recycled fuel stuff, we know that

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some of the transuranics will isolate in certain areas and certain processes.

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DR. NETON: Right.

MR. GRIFFON:

DR. NETON:

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around some of those processes but you give them

If this individual worked

Well, that's an example where

I guess it's -- it seems

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the -- you assign them the -- you know, without

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knowing that, you assign them the average, you're

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potentially, you know, missing --

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10 it's a bad dose -- it's a bad profile. Right?

mean we haven't done our job. And if we knew --

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if you know that material's there and -- for

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instance, we didn't know that the worker didn't

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work at one of -- if we couldn't establish he

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worked at a trap or not, where maybe the

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neptunium or whatever concentrations were

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extremely high, we almost have no choice but to

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then to say okay, that's -- that's a --

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potentially your exposure scenario, you know. I

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mean there's just no way around that.

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to me that defining some of these source terms

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can be a complex exercise 'cause some of these

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facilities over time --

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DR. NETON: Sure.

MR. GRIFFON: Okay.

2 DR. NETON: Yeah, absolutely. But I think if you look through our dose reconstructions you'll 3 4 find that they tend to overestimate exposures in 5 general. 6 DR. ZIEMER: Let's now recess for lunch. I'd 7 like to ask if we could still shoot for 1:30 8 return time. It does shorten lunch period a 9 little bit, but try to keep us on schedule. 10 Thank you. 11 (Whereupon, a luncheon recess was taken.) 12 DR. ZIEMER: I wanted to give an opportunity 13 for any additional questions for Jim. We were pushing the lunch hour and needed to recess. 14 15 are there any remaining questions for Jim Neton and -- relative to his presentation -- comments 16 17 or questions? Yes, Jim Melius. 18 DR. MELIUS: I have one. 19 DR. ZIEMER: And --20 DR. MELIUS: I don't think -- Jim can stay there, that's fine. Either one. 21 22 DR. ZIEMER: Either place, wherever you're 23 comfortable. 24 DR. MELIUS: It's sort of a follow-up to what I asked before. I came to me over lunch. 25 But I

MR. GRIFFON: -- very dynamic and...

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guess I get -- I get concerned, I think others of us are concerned about sort of false negatives, that we -- you'll miss important information that might affect some proportion of the dose reconstruct -- individual dose reconstructions that are done at a particular site because the information's not readily available, whatever. And I guess my question is have you thought about some sort of a decision plan or approach that -for -- you finish the site profile with whatever information's available. You're going through doing the dose reconstructions and there's a group of workers in a particular part of the facility that there's a great deal of uncertainty about their -- the available exposure information for them, or that requires further work, or based on individual dose reconstructions they're not in the high category, those that are -- will be compensated, or the low -- but they're sort of closer to the decision point that you may -- you might hold up their dose reconstructions until you've done more work on the site profile? guess I'm worried about this, you know, sort of steaming through, doing all X hundred cases from some facility and then finding out that well, we

1 later found, you know, information that for 50 of 2 them was -- really changed how we did it, or maybe even for five. 'Cause I think to have to 3 4 go back and correct that kind of error would be 5 problematic, and I think it might be taken care 6 of up front as you're sort of developing your 7 document. 8 DR. NETON: I think I have your question. 9 it if we have a site profile done and we have a

it if we have a site profile done and we have a group of workers that we're trying to move those dose reconstructions through the process but we feel that the site profile is not sufficient to put them on one side of compensability or not, what would we do with those claims?

DR. MELIUS: Yeah, I mean or that --

DR. NETON: Yeah.

DR. MELIUS: -- might be built into the
process that we're not going to process these
because --

DR. NETON: Right.

DR. MELIUS: -- there's a great deal of uncertainty about a particular -- or availability of records for a particular building or, you know, particular type of exposure.

DR. NETON: Yeah, I think that's correct. We

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would not move them through just for the sake of moving them out the door and checking the box or something to that effect. Those would be held up until we had sufficient information to -- so that Labor could make a decision, you know, one side or the other for compensability. So you know, I'm not sure what else to say on that.

DR. MELIUS: No, no, that's fine. I'm just thinking that ought to be communicated as part of this proc-- I'm just saying --

DR. NETON: Okay.

DR. MELIUS: You're saying yeah, there are limitations to these site profiles. They're not final and we're continuing to seek information. We're not going to inappropriately use them until we're -- we feel that the information is adequate.

DR. NETON: Right. I thought I -- I tried to allude to that a little bit in my presentation when I pointed out that -- for instance, if we do a claim that was involved in an incident or several incidents and they weren't covered in the profile, you know, there's just no way we would be able to move that claim without, you know, obtaining additional information.

DR. MELIUS: Okay. Thanks then.

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DR. ZIEMER: Henry Anderson.

DR. ANDERSON: Yeah, I just wanted to follow up on that a little bit. I just quickly went through the Savannah site review or base document on -- and I had some difficulty identifying what were the specific data gaps that you may have identified. And I think, again, if it's going to be a living document, it would be helpful, again, from the standpoint of those individuals who might, as we just talked about, not have their claim finalized, it would be helpful -- almost like a data call-in -- to say here's what we currently have and here's some indications or we believe there may be additional information that we're looking for. I think that might be a more -- trigger more people to send information in.

And then the second statement, I would just ask is there have been quite a number of lawsuits involved in the various sites, and as part of that they typically have quite a bit of discovery and documents are produced. And it would be ni-and usually they're listed by some type of a name. It might be useful as readily available information to look at those to see if that data

and information is included in your site profile. That's just a -- I would assume most of it is, but there may well be some information there if you have not mined those. I know in a lot of the other litigation that's often turned out to be a very useful source. It's very laborious to go through, but it might be something to look at.

DR. ZIEMER: Okay. Thank you, Henry. Other comments or questions?

(No responses)

ADMINISTRATIVE HOUSEKEEPING AND BOARD WORK SCHEDULE

Thank you. Let's move on in the agenda then. Our next item is some administrative issues. I would like us to first turn to the charter, and the reason I ask you to turn to the charter is to make note of the fact that our charter, you know, runs a two-year cycle. And if you look on page 3 of the charter, at least the version of the charter that's in your book, you'll notice it's dated August 1st, 2003, signed by Tommy Thompson. So this is the current charter.

Now if you read through that, I note many things haven't changed. For example, I notice your compensation has not increased by cost of

living or any other factor, for whatever that's worth, which apparently is not much.

What is different here in this charter is on page 2 under the item called structure. And if you read through structure, you will notice that -- wait a minute, am I in structure?

MR. ELLIOTT: Second paragraph.

DR. ZIEMER: Second paragraph of structure, yes. I was looking for something that is new in our charter, and that has to do with specific terms of the members. And Larry, could you speak to that issue for us?

MR. ELLIOTT: Yes, thank you, Dr. Ziemer.

The -- in renewal of the charter, the White House and the Department incorporated term -- membership terms for this body now. It wasn't resident in the first charter. It is in this renewal of the charter. We will be talking to each individual Board member about the term of membership that's been specified for you. This is -- it's an HHS policy, as well as FACA, to have term memberships. I think it perhaps is -- is something that was attended to at this charter renewal that was perhaps lost in the initiation of the first one. So as we go forward, we will

be contacting you individually and talking to you about membership and term of membership.

DR. ZIEMER: Okay. And Henry, question or comment?

DR. ANDERSON: Yeah, a question. Do you have any thought as to how many terms one -- I mean usually it's -- you know, I think a four-year appointment. It's nice to know it's not an endless appointment, from both sides. But oftentimes they have -- but no more than two consecutive terms, and I see they don't have any. Do you see that as a -- when you say a term, do you mean that everybody will only serve four years?

MR. ELLIOTT: Well, I would direct your attention to the way that paragraph starts. You are Presidentially appointed and you serve at the pleasure of the President. And the White House has designated terms. They are going to be staggered terms so that each year there will be a moderate turnover of the Board, perhaps. In some cases maybe the White House will say they want to keep someone in place in membership. I believe FACA says that you can -- as you noted, that you can serve up to a specified number of terms or a

specified number of years.

DR. ANDERSON: Yeah.

MR. ELLIOTT: Also I would call your attention to the last sentence in that paragraph where it says terms of more than two years are contingent upon the renewal of the charter, so you know, there's a lot of factors that come to play here in making these appointments happen. And so I just wanted to call your attention to this fact that in this charter renewal this now exists.

DR. ZIEMER: Larry, it would be my understanding then that the current Board membership would be assigned varying terms, so the whole Board does not get replaced at one time. Presumably what, a third of the Board every two years or something like that. Can you speak to the issue -- has the White House made such a determination already or are -- will that be made soon?

MR. ELLIOTT: Yes, that determination has been made and the way it was made, the Board was grouped into three categories on an alphabetical order, A to Z. The first grouping of four would go off a year from now, second grouping would go

off two years from now -- with a possibility of reappointment. This is up to the President, up to the White House, so -- and the third grouping would go off three years from now. So that's the way this has been arranged in their appointment cycle.

DR. ZIEMER: Thank you. Are there questions or comments on the charter, or the terms?

(No responses)

Thank you. Now let me ask Cori if we have additional -- or Larry, do we have additional administrative matters at this time -- or housekeeping matters?

MR. ELLIOTT: I don't believe that -- Cori's standing back there shaking her head no, but I would remind you all of our process of e-mailing Cori or myself with your time of preparation.

Cori says she'll remind you with an e-mail tomorrow morning. It's important that we get your travel voucher in for -- back as soon as possible so that we can -- this is very important, so please hear me out. We're approaching end of year, fiscal year closeout, and so if you don't want the hounds coming after you for your voucher info, please submit that so

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that we can close the books on this fiscal year.

We do need -- perhaps not at this point, but later before we depart today we need to figure out what your next meeting schedule is, and I think that may be dictated by perhaps the discussion to ensue shortly.

DR. ZIEMER: Cori did ask all of us to send her our schedules for the next -- I think for the remainder of this calendar year. And if you haven't already done that, you need to do that, as well.

Do any of the Board members have any questions on work schedule, administrative procedures, housekeeping items?

(No responses)

If not, we'll proceed on the agenda and move to the working session and -- on development of the task order and I'll give the floor to Mark Griffon. Mark.

BOARD DISCUSSION/WORKING SESSION DEVELOPMENT OF TASK ORDER

MR. GRIFFON: Yeah, we -- we have several items, including the homework assignment from last night. But I thought -- I guess the way I want to approach this is this morning the working

group met again and we went through the two tasks that were handed around the table yesterday morning, which -- which are for dose reconstruction review and for procedures and methods review. And I thought -- I think -yeah, Cori's handing out -- we -- we worked and edited those this morning and have them in more final form. And my feeling is that I'd like, in our time period that we have, to get as much -items completed as we can. I think we have some open-ended discussions on some things, which I'll hold off a little, if we can. So I'd like to start with discussions on those two tasks. then talk a little about the process of how we're going to review these tasks and what that will involve, and that may impact some discussions on future meetings, et cetera. And then the -there's a couple of other tasks that I've developed real rough drafts of tracking tasks and a site profile task, and then finally what -some -- I think we need some follow-up discussion on the question on interviews, or follow-up interviews.

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So -- but to start with, something that I think is hopefully nearing a final draft, these

two tasks which just got circulated. I think I maybe we can open up a discussion on them, and
the language should look very familiar by now to

people in these things.

To start, the one -- the first one, dose reconstruction procedure and methods review, the shorter one of the two, we added -- and I left the -- I didn't accept the changes on the track changes mode. I left the changes there so you could see where we really edited this morning. And Roy DeHart brought up a good point that, you know, it seems like we should have asked the contractor to, up front, establish a procedure by which they're going to review all of NIOSH's and ORAU's procedures and methods. And that procedure would also be reviewed by the Board for approval.

And in the bottom two sections you'll see some editions on the period of performance and the reporting and deliverable requirements. Give you all a second to look at those.

(Pause)

DR. ZIEMER: Mark, while people are finishing up reading that, I just want to ask a process question here, and perhaps both to the working

group and to NIOSH staff. And that is, in terms of the content and the form, does this meet the requirements for a work statement? I assume it does since you've had Jim and others working with you on that. So this would meet those requirements, in terms of the specificity and detail -- level of detail. And presumably the contractor would then take this a develop the cost document for final approval. Is that correct?

MR. ELLIOTT: Yes, the -- you're -- the Board would deliver this -- a task order to the contractor, who would then be allowed an opportunity of perhaps two weeks to prepare a proposal on how they would conduct the work specified in the task, describe what skill categories would be employed in that effort and provide a cost estimate. And that would -- that proposal would come back to whoever the Board or whatever your process is going to be -- how it's going to be specified, who will take that proposal, evaluate and, if necessary, negotiate it.

DR. ZIEMER: And then my related question -- again to staff and to Mark -- is that do we need

1 today to have an approved statement of work for 2 that purpose, or are we still looking at this as subject to some final polishing? Are you simply 3 4 looking for Board input and reaction today or are 5 you looking for closure today? 6 MR. GRIFFON: I was hoping that for these 7 two, since -- that we need closure on these 8 today. Yeah, and move these forward, at least in 9 the system. 10 DR. ZIEMER: So at some appropriate point 11 when we think we're ready to do so, then we could 12 have a formal motion to approve the document. 13 Okay. 14 Mark, do you have any more comments on the 15 document, then we can put it on the floor for 16 formal discussion if you want to so move --17 MR. GRIFFON: Yeah, I'd like to -- I'd like 18 to --19 DR. ZIEMER: On behalf of the working group, 20 you move adoption of this statement of work? 21 MR. GRIFFON: Thank you for making -- yes. 22 DR. ZIEMER: That's what I thought you were 23 -- reading the body language. 24 MR. GRIFFON: Right. 25 DR. ZIEMER: And that basically is a motion

from a working group. It doesn't require a second in that case, so it's on the floor for discussion. This is only on the first statement of work -- I'm trying to identify it -- as -- I guess it's dose reconstruction procedure and methods review --

MR. GRIFFON: Correct.

DR. ZIEMER: -- is the title of the statement of work that we're considering now. And I think we can both raise questions, you can ask for clarifications, you can move for amendments to this.

Robert Presley.

MR. PRESLEY: Where we have put in months, do we need to go in and change that one month to 30 days, six months to so many days. Where you've got two weeks --

DR. ZIEMER: Robert, identify the item here
for all of us.

MR. PRESLEY: Okay, period of performance, second page.

DR. ZIEMER: Okay.

MR. GRIFFON: I would say -- I mean I would say, similar to the original contract language that we did, I think we can allow NIOSH to make

technical edits as long as they don't change the
-- you know, the nature of the -- and I think
that was done previously to tighten up some of
the language, so if that needs to be done, that's
fi-- you know, I would think that would be fine,
yeah.

DR. ZIEMER: Okay. Everybody understand the

DR. ZIEMER: Okay. Everybody understand the question there? So you're not asking that this language necessarily be changed, it's -- or are you?

MR. PRESLEY: I think we need to ask legal where we need to tie that down.

MR. ELLIOTT: I want to be clear on what you're asking us to do here.

MR. PRESLEY: Where we have -- like one month, do we want to tie that down to 30 days? Especially where you have in there within six months, that can float quite a bit within a six-month period.

MR. ELLIOTT: Well, let me just suggest this, that once your task has been developed, we would then put that in front of the procurement office, and any kind of issues like that -- it's going to come from them, not us. And so the procurement office will drive those kind of edits. If they

say hey, it needs to be so many working days versus a calendar month, that'll come back from them and we'll rely on them, if that's okay with you all.

DR. ZIEMER: Right. So the intent is here and they can polish that. Is that agreeable with everyone? We can leave the language as it is for the moment then. Okay.

Wanda.

MS. MUNN: This question may derive from my lack of familiarity with the procurement process, but I see no indication of establishing any criteria for bidders here. Are we just going to say anybody who thinks they can do this, do it? Or do we establish criteria?

MR. ELLIOTT: Well, this is the next phase of procurement. The first phase was to put a request for proposals on the street, which you did, that provided a boundary, if you will, about the scope of work. Now within that scope of work, once your contract is awarded, you're going to give the contractor task orders. That's what this is. And so there's no need for -- you know, you're not -- even if this -- if this contract is awarded to multiple awardees, they're still given

the same level playing field in one task. They don't need that.

If I could also comment here on what I said earlier about relying on procurement to help make sure that we're following proper procurement procedures, on the first page under purpose and description paragraph, the second sentence -- The task may be extended to be a periodic annual review. I think we're going to have a little bit of problem with that. You might want to think about that 'cause you can't promise future work. You can only task under one task. Now you can resurrect this same task later, say -- say a year or 18 months later you want to have the contractor conduct the same task, then you -- you just issue a new task. But you can't promise future work in a task. Okay?

MR. GRIFFON: I -- yeah, if they want to look at it -- I mean the intent there was that -- in "may" -- we put "may" because you said -- that's what we heard, that you can't promise future work in the task.

MR. ELLIOTT: I think what procurement will say is that that sentence needs to come out. But we'll leave it up to procurement if --

1	MR. GRIFFON: As long as we've established
2	DR. ZIEMER: In which case, the following
3	sentence would also come out because it explains
4	why the period
5	MR. ELLIOTT: Right.
6	DR. ZIEMER: periodic review, so
7	MR. ELLIOTT: Right, you can reissue a task
8	previously done
9	MR. GRIFFON: Right.
10	MR. ELLIOTT: at any point in time, but
11	you can't promise future work.
12	MR. GRIFFON: Okay. That may come
13	MR. ELLIOTT: It builds expectation
14	MR. GRIFFON: That may come up in the next
15	one, too, so
16	DR. ZIEMER: And I think, Mark, you're saying
17	the word the use of the word "may" doesn't
18	promise anything, but Larry's suggesting it may
19	nonetheless raise the
20	MR. GRIFFON: Well, I
21	DR. ZIEMER: anticipation level or
22	yeah. Or it could be left out. It doesn't
23	change the immediate task.
24	MR. GRIFFON: I actually you know, it was

in the original task order contract, too, so I

1 don't know if we promised it in there. All this 2 language was lifted from that. And also for the 3 individual dose reconstruction reviews, it talked 4 about five years of reviews in the original 5 contract that we put out. 6 MR. ELLIOTT: But you're talking about RFP 7 versus an individual task. 8

All right, that's fine. MR. GRIFFON:

MR. ELLIOTT: And I think -- I think procurement's going to say to us that each task has to be a stand-alone and can't --

MR. GRIFFON: That's fine.

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MR. ELLIOTT: -- can't indicate that there's going to be, you know, follow-on work on that same task. There's a discrete -- these are discrete tasks with discrete deliverables, discrete endpoints, and that's what they're going to -- I'm pretty sure they're going to preach that to us, so...

MR. GRIFFON: Yeah. I have no problem with that coming out if it has to come out.

DR. ZIEMER: Any objection to deleting those two sentences since there is no promise of future extensions in any event? Without objection, we'll just delete the second and third sentence

NANCY LEE & ASSOCIATES

1 of that paragraph then. That's the sentences 2 that say "This task may be extended to be a periodic annual review of procedures since it is 3 4 likely that procedures will be modified as the 5 program evolves. The focus of the periodic 6 reviews will be to assure overall consistency of 7 the program from the earliest cases that were Those two sentences would then be 8 completed." 9 deleted. Thank you. 10 Other comments? 11 (No responses) 12 Is the Board then ready to take action on this statement? 13 14 (No responses) 15 It appears that we're ready to vote. I'11 ask that all who favor this -- the statement of 16 17 work as modified, please say aye. 18 (Affirmative responses) 19 Any opposed, say no. 20 (No responses) 21 Any abstentions? 22 (No responses) 23 The motion carries.

NANCY LEE & ASSOCIATES

there is the lengthier one on individual dose

MR. GRIFFON: Okay. The second task order

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reconstruction review. Again, I think -- just -just to pick up on the point we just discussed,
in the third paragraph, the last sentence, I
guess we should delete the sentence starting "The
Board anticipates that the next four years will
also involve a review of 2.5 percent of the total
cases." Is that correct, Larry? I think that
has to come out -- those last two sentences, also
the sentence saying "For purposes of this
proposal the contractor should only consider the
first year workload." So those last two
sentences will be removed.

MR. ELLIOTT: Yes, I think that would be

MR. ELLIOTT: Yes, I think that would be advisable. And here again, just so it's on the record here and I'm clearly not trying to drive you one way or another, this -- this is -- on the previous one, the word that bothered me was "extended", not "may". You know, you can't -- it's got to be a discrete task, and you can just reissue the task again once you have the deliverables in your hand, and virtually have them work the same task at a different time.

MR. GRIFFON: The only other thing I wanted to note was on the last page -- really everything in the middle is remain the same. The last page,

1 period of performance, is new. I'm sorry I didn't leave these highlighted. I accepted the 2 3 changes. And reporting/deliverable requirements 4 is a new paragraph, as well. And I think in 5 there I reference this procedure that I gave to 6 everyone last night to look at, processing 7 individual dose reconstruction reviews. I was 8 going to give it a procedure number, but I think 9 we should just delete that at this point. We can 10 reference it by name. 11 DR. ZIEMER: Mark, are you suggesting that 12 where it says "Board number XX", that would just 13 be deleted from your document? 14 MR. GRIFFON: Yes. Yes. 15 DR. ZIEMER: In the very last paragraph. 16 MR. GRIFFON: Uh-huh. 17 DR. ZIEMER: It's just what would have been 18 an ID number. Right. 19 Okay. Questions or comments? Are you moving 20 adoption of this procedure -- or statement of 21 work? 22 MR. GRIFFON: Yeah, I think the working group 23 would make a motion to --24 DR. ZIEMER: On behalf of --25 MR. GRIFFON: -- to accept this --

1 DR. ZIEMER: -- the working group --2 MR. GRIFFON: Yeah. 3 DR. ZIEMER: -- you're so moving. This 4 doesn't require a second. Comments, questions? 5 (No responses) 6 Mark, just for clarification because the 7 interview issue arose before, in this particular document the interview item, which is on the 8 9 second page, it's item B, "Evaluate whether or 10 not NIOSH appropriately addressed the reported work history" and so on, there's nothing in here 11 12 specifically that calls for post-claim 13 interviews, as such. This simply calls for a review of the interview in terms of documentation 14 Is that not correct? 15 on hand. 16 MR. GRIFFON: Yeah, that's correct. This 17 language was exactly as in the proposal. 18 DR. ZIEMER: Right. 19 MR. GRIFFON: So yes. 20 DR. ZIEMER: Okay. I raise that mainly so 21 that there's no question that -- the other issue 22 that we discussed can still arise later, but not 23 in the context of this document. This document 24 does not call for that particular procedure. 25 Yes, Roy DeHart.

1 DR. DEHART: Mark, isn't it correct that it's 2 only in the advanced review, which is on page 3, advanced review --3 4 DR. ZIEMER: Use your mike there, Roy, if you 5 would, please. 6 DR. DEHART: My question addresses the 7 advanced review. It is in this document item 2, 8 page 3, that we first do the site profile. 9 that correct? That the basic does not do a site profile, but this -- at this level, we do. 10 11 MR. GRIFFON: Yes, in the -- yes, this -- the 12 advanced looks at is the dose reconstruction 13 consistent with the site profile, so it sort of 14 ties those two together, right. The basic does 15 not go to that depth, that's correct. DR. ZIEMER: Tony, another question or -- no? 16 17 Okay. 18 DR. ANDRADE: Paul --19 DR. ZIEMER: Yes, Tony. 20 DR. ANDRADE: Perhaps I do have a question. 21 With respect to the advanced review, on item B, 22 item 1 under B, it says "Evaluate the 23 effectiveness of the phone interview". As you 24 said, it really doesn't go into the specifics of 25 the procedure for doing so. However, this is

kind of an -- what I would say an open-ended work statement that's going to -- it's going to require or probably going to get -- likelihood is that the contractor will come back with a question as to what -- a clarification of effectiveness is, and I think we're going to get back into the same discussion that we were engaged in yesterday. So I just wanted to note my concern with respect to this particular item on the SOW.

DR. ZIEMER: Mark, do you want to respond to that?

MR. GRIFFON: I mean just that it wouldn't allow for the re-interviewing. They can do -they are required to evaluate the effectiveness of it based on the documented phone interview form, and that -- that's where it stops. They're not allowed -- under this task they're not -they don't have the option of re-interviewing any claimant. So you know, they -- they may have some questions on what "effectiveness" means, but you know, the option of re-interviewing is not opened up there.

DR. ZIEMER: Tony, are you okay on that or you feel it lacks clarity or...

DR. ANDRADE: No, I'm satisfied with the response. I do have a feeling we are going to be handed requests for clarification, but that's really the only point I had to make.

DR. ZIEMER: Okay. Roy DeHart.

DR. DEHART: There is one other way of looking at the effectiveness. That is if the interviewee responds, after reviewing what has been documented from that interview, with a lot of additional comments, and we see that repeatedly, then something's faulty with the interview process. So there's ways of looking at that.

DR. ZIEMER: Jim?

DR. MELIUS: Another separate question.

Regards the -- that -- the previous question about site profile and the site profile only coming up in the advanced review, did the task group think -- I guess -- didn't really hear about this in detail till after you met this morning. Given that it appears that the site profiles have become a sort of a basic procedural document that are going to be used in all of -- nearly all of the dose reconstructions, shouldn't -- don't -- should we include that in the basic

review, I guess is my question, since it's going to be central to so many -- right now we sort of evaluated against the procedures and other procedures and so forth. To me, the site profile is described -- has almost become a -- you know, a standard procedure and that we ought to be evaluating it and I think it would be relatively straightforward to do that. I just can't see how the -- how you can avoid doing it.

MR. GRIFFON: Yeah, I actually -- now that -I actually think it's going to happen, you know.
I mean if -- if the site profile is working the
way we see the efficiency process working and
things like that, it's probably going to be
referenced in the bas-- in all the -- you know,
in all the dose reconstructions. And I guess -yeah, and we didn't know of this until, you know
-- so this is kind of new for us. But the other
thing is that for the -- for a more extensive
site profile review, we're going to have a
separate task, too. So we do have the chance to
review the site profile as a separate entity.

DR. ZIEMER: I might add a comment here, too,

Jim. I think that item A.2 of the basic review

opens the door for including the site profiles

insofar as it tells the reviewer to review the data used by NIOSH for that case. And indeed if site profile was part of that, I think the door is open for -- I don't think it's excluded, is what I'm saying.

DR. MELIUS: Yeah, I think it actually fits under several of these --

DR. ZIEMER: Yes, right.

DR. MELIUS: -- as I'm reading through, and I
guess --

DR. ZIEMER: It's not called out specifically, but it certainly is -- if it's been used, it's there.

DR. MELIUS: Yeah, okay. Right.

DR. ZIEMER: Yes, Larry.

MR. ELLIOTT: If I might make a suggestion on page 4, item 3, blind dose reconstruction, I think it would be beneficial if you would specify who's going to select those ten. I know it's implicit in page 1 down at the bottom there, first -- or the last paragraph of page 1, but I -- it -- I think it should be clear that the Board is going to make those selections, not your contractor. You're going to -- somebody's going to have to create these ten case files that are

1 blind, and you don't want your contractor doing 2 that, I'm sure. And we're not going to do that, I'm sure. See what I'm after? 3 4 DR. ZIEMER: You're talking about item 3 on 5 the last page, I believe. 6 MR. ELLIOTT: Item 3, page 4, blind dose 7 reconstruction. In that two or three-sentence 8 paragraph, I think you should be explicit as to 9 who makes those -- who selects those and prepares 10 them. 11 MR. GRIFFON: And it's not -- I mean we say 12 it up front, but you say we should restate it 13 especially for the blind -- the preparation of 14 the cases, as well. MR. ELLIOTT: Well, I think it --15 16 MR. GRIFFON: Not only -- not only selection, 17 but preparation of the... 18 MR. ELLIOTT: I don't see it explicit up 19 front. I think it's implicit up front that the 20 Board is going to do it, but I -- you know. 21 MR. GRIFFON: Maybe it doesn't, okay. 22 DR. ZIEMER: Mark, I believe that certainly 23 was your intent. 24 MR. GRIFFON: Yes. 25 DR. ZIEMER: If it's not explicit here,

1 perhaps a sentence could be added --2 MR. GRIFFON: Yeah, I think --3 DR. ZIEMER: -- to that. 4 MR. GRIFFON: -- we should add it, yeah. 5 DR. ZIEMER: Could we --6 MR. GRIFFON: I thought it was up front. 7 DR. ZIEMER: Yeah. 8 MR. GRIFFON: Re-reading... 9 DR. ZIEMER: Could we simply agree that an appropriate explicit sentence would be added? 10 11 don't know if it's to be up front or there. 12 while you're thinking about that, Wanda, you have 13 another item? MS. MUNN: Yes, I might address that one, as 14 15 well. Wouldn't it probably be cleaner to just 16 put it up front on the first page and say ten 17 blind review cases, specifically chosen by the 18 Board? MR. GRIFFON: Actually even further than 19 20 that, I would say why don't we just add a 21 sentence at the end of that third paragraph on 22 the first page saying that the Board shall select 23 all cases for review, period. And that makes it 24 clear that the contractor's not.

MS. MUNN: All right.

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DR. ZIEMER: Is that agreeable? You're adding that at the first paragraph on page 1?

MR. GRIFFON: Bottom of the third paragraph on page 1, yes.

DR. ZIEMER: Give us the wording on that again, Mark.

MR. GRIFFON: The Board shall select all cases for review.

MS. MUNN: For this review or these reviews?

DR. ZIEMER: Okay? Wanda, do you want to continue? Without objection, we're making that modification. Okay.

You had another item then?

MS. MUNN: Yes. Originally I was back on page 3, B.1 again, the concern that had been expressed earlier with respect to what do we mean by "effectiveness" and where we can go from there. I might suggest a slight wording change so that it would read -- since we can't expect this contractor I think to actually verify effectiveness, I don't know how you'd do that. Perhaps evaluate the completeness of the phone interview and ascertaining that all relevant work history information has been addressed. That's really the best they can do, isn't it, to make

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sure they cover the waterfront?

DR. ZIEMER: I suspect we're all a little fuzzy on that. I'm not sure we know whether they can evaluate the completeness, either. What -- I guess it would come down to what do you mean by the completeness of the phone interview.

MS. MUNN: We have the form identified. The form is as complete as we can get it, in terms of this is the material that needs to be covered when you interview these folks. Now is the material that's on the form that we've agreed is going to be used adequately represented in the report that NIOSH is submitting as its report of this interview.

DR. ZIEMER: Well, anyone want to respond? It's -- maybe we need both words, "effectiveness" and "completeness". Or maybe we just need "evaluate the phone interview".

DR. MELIUS: I was going to say maybe we can qualify it better by saying "based on the available record of the phone interview and other information in the case record, evaluate the phone interview in ascertaining relevant work history information". I think we -- I think if we limit the -- what they're directed at rather

1 than trying to describe the evaluation, I think -2 - I think it's easier. 3 DR. ZIEMER: What Jim is suggesting, I 4 believe, is that it would say "evaluate the phone 5 interview in ascertaining relevant work history 6 information". 7 DR. MELIUS: Based on --8 DR. ZIEMER: Do you want to add any 9 qualifiers or is that --DR. MELIUS: The qualifier I would add is 10 11 "based on the -- the record -- record of the -available record of the phone interview and other 12 13 information in the case record" -- 'cause they would use other information from the case record, 14 so it's still a records-based review. 15 16 DR. ZIEMER: Without using words like "completeness" or "effectiveness" or --17 18 DR. MELIUS: Completeness, right, or... 19 DR. ZIEMER: -- which may have specific 20 meanings. DR. MELIUS: And we're directing them at the 21 22 ascertaining the relevant work history 23 information. That evaluation can include various 24 components, but I think if we circumscribe it to just what's available in the record, I think 25

we...

MS. MUNN: Then can we just simply say "Evaluate the phone interview to ascertain that all relevant work history information has been addressed"? The simpler the better, I think.

DR. ZIEMER: Yes, that's a possibility.
Tony?

DR. ANDRADE: As you'll probably see tomorrow, you'll gather bits and pieces in certain interviews, and especially when it's survivors that are being interviewed. There may be very little that has to do with the actual claimant's work history. And so there's not really going to be a validation or a vetting of information in many instances on what the interview -- what came out of the interview versus other data that may be available, such as a site profile.

MR. GRIFFON: Yeah, we do address the survivor issue, as well, in the second bullet in B, yeah. But I mean I think -- I think -- well, actually I think the simpler the better. I'm not sure I have a problem with the original language, but if we have to say "evaluate the phone interview in ascertaining relevant work history

information based on the phone interview record, along with the relevant documents within the administrative record", I think that'd be fine.

DR. ZIEMER: Well, I guess I would even question whether we need all that -- how are you going to evaluate the phone interview record if you don't use the phone interview record? I mean why do we have to say based on the phone interview record?

MR. GRIFFON: I agree, you can stop --

DR. MELIUS: I think we're -- we started this out by questioning whether what -- a scope of what we were doing, and so it -- try -- one issue to try to circumscribe the scope, make sure that it is on the record, and the second issue, which is Wanda's, exactly what does the evaluation entail.

DR. ZIEMER: Well, you know, in these other evaluations, we're not spelling out in detail how they're to be done. Part of what the contractor's job is going to be is to develop evaluation tools. Right? So why not let them do that here, also? Eventually we will have to approve those tools.

MR. GRIFFON: Yeah, the -- and I think your

1 -- Paul, your suggestion, "evaluate the phone 2 interview", drop out "effectiveness of the". DR. ZIEMER: Yeah, "evaluate the phone 3 4 interview in ascertaining relevant work history 5 information", boom. 6 MR. GRIFFON: Leave it at that, yeah. 7 DR. ZIEMER: Anyone object to the -- keep it 8 simple, as someone has suggested -- Wanda, I 9 guess -- and -- I mean we've not tried to tell the contractor here how to develop all these 10 11 tools in the other stuff, so -- okay. Is that 12 agreeable? 13 (No responses) 14 Okay. So without objection, we will just delete the words "the effectiveness of". 15 Now, are we making progress? Yes. Other 16 items? 17 18 (No responses) 19 Are we ready to take action? 20 (No responses) 21 It appears we may be ready to act on the 22 motion to approve the statement of work for 23 individual dose reconstruction reviews, with the 24 two minor modifications that -- one of which was 25

part of the original motion, the change in the

last two sentences on page 1, and then this minor change on the phone interview statement.

Okay. All who favor then this statement of work -- oh, I'm sorry. Mike.

MR. GIBSON: We'd had some discussion earlier on about the advanced review of the site evaluations documents really wouldn't be an advanced review, it'd be part of the process. Is there -- do we want to delete "advanced review" and add that into the basic scope on page 3, or are we just considering the fact that that goes along without saying?

DR. ZIEMER: Let me try to answer that, and then maybe Mark can clarify. I think the original question that was raised was sort of along the lines of does the basic review exclude site profiles, something like that. And I think we agreed the answer was no, not necessarily. If site profiles were used in those dose reconstructions, that's open game for that review. The advanced review is more specific in calling for that site profile review, partially because the advanced review in many ways is looking at the administrative record in more detail than the basics. But I think we believe

1 that it's not excluded. Is that -- yeah. 2 you okay on that, Mike? 3 MR. GIBSON: Yeah, I just wanted to make sure 4 we're --5 DR. ZIEMER: Yeah, right. Right. Okay. Now 6 are we ready to vote then? 7 (No responses) I think we are. All who favor the motion to 8 9 approve this statement of work on individual dose 10 reconstruction reviews, please say aye. 11 (Affirmative responses) 12 Any opposed say no. 13 (No responses) 14 And any abstentions? 15 (No responses) 16 Motion carries. Thank you very much. 17 Does the working group have any other items? MR. GRIFFON: 18 Yes. 19 DR. ZIEMER: Thank you. Please proceed. 20 MR. GRIFFON: Okay. The next item is really 21 a discussion item following up from yesterday's discussion. And we -- this morning in our 22 23 working group meeting we asked NIOSH some 24 questions on the contracting process, and I had -25 - now that we have two tasks approved, this is --

you know, obviously we have to push these forward. Larry answered one question, which is that once the tasks are released to the contractors, they'll probably have about two weeks to respond -- didn't you say -- I'm not trying to put words in your mouth.

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Then the question, I guess -- we had some questions, which I'm not sure if they were procurement questions or FACA questions, I think a little bit of both. What steps would be involved from there on out and what would be the time frame. And I think a discussion that we have, which we couldn't really answer this morning, was would the entire Board have to act on any meetings with the contractor to resolve scope or -- or to approve the task to move forward, could a subcommittee take that role. And then further, could those -- would those discussions require executive session. And so we had some of those issues that we just didn't have answers to but we think we need to raise them and get answers fairly quickly so we can move ahead.

You have the answers?

MR. ELLIOTT: Okay. Well, I don't have the answers, but we certainly captured, I believe,

between general counsel and staff this morning that sat with you, the list of questions you raised and we'll be pursuing the answers for those very expeditiously.

MR. GRIFFON: I think what -- what we also talked about this morning in our working group was that we as a working group probably -- may want to consider a meeting in Cincinnati, maybe at -- for -- it probably wouldn't -- I mean if we have one day to dedicate to this, we could iron through the rest of -- some of this stuff and then report back to the full Board and have, you know, more final tasks like this to move through, and also a clearer understanding of the process.

MR. ELLIOTT: Sure.

MR. GRIFFON: I think that'd be a worthwhile endeavor.

MR. ELLIOTT: We'll certainly support that and assist you in scheduling it. I also would -- not to steer you in another direction, but I do think it would be beneficial for you to come forward with the task that speaks to the tracking of your cases, but also this -- you know, I hadn't thought of it until Dr. Ziemer mentioned it, but the tools that you're going to --

evidently you want to review the tools and approve the tools that are going to be used by your contractor. And you may want to wrap that up into one task, the tracking task, perhaps. I don't know if it makes sense to do that or if you need two tasks, but you're going to have to specify at some point in time that you want to see the tools and you want to approve the tools and what those tools are to be, so maybe -- maybe a full day --

MR. GRIFFON: Yeah, we -- we --

MR. ELLIOTT: -- you could get to all of
that, I don't know, but --

MR. GRIFFON: Yeah, we -- I did take a stab at an initial case tracking task, but in -- we didn't even have time to discuss it in our morning working group session. And part of what I was thinking was the case -- the case tracking task was going to do was I envisioned that -- and I was looking at this along with the question of case selection, and thought that a reasonable task to ask the contractor to do up front would be to work with NIOSH and establish a baseline matrix of all the cases and laying out all the parameters of interest for us -- the Board. Then

once we have the baseline matrix, then we have something to sample from, to get our cases from. And some of these things — in informal discussions I've noticed that some of these things may not be simply there to pull off the database — there may be a little work involved to get some of the parameters. You know, one parameter we're considering is job group or first decade employed is some other parameters we've thrown out. So it may not be just something that they can simply pull — you know, so that would be a sub-task for the contractor to develop would be this matrix of cases versus — versus the various parameters, including site and all those parameters we've discussed in the past.

MR. ELLIOTT: Did you also have a discussion about the process of review itself? We need to get a sense of how you see that running. And maybe Jim's got this from your discussion, I don't know. But you talk in the task orders about selected Board members working with the contractor in the review. Have you had discussion about how that'll work and can you share that with --

MR. GRIFFON: Yeah, we -- the procedure that

we passed around last night was the first stab at sort of outlining how that process is going to work. You know, I think we -- we had further discussions on that this morning involving the question of -- of reports back to the full Board and what they're -- you know, how we have to be careful of Privacy Act issues on those public reports. So that is -- and we could do that next. I think we should do that next, you know, but we did discuss that this morning.

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DR. ZIEMER: Mark, I also want to make sure that the Board goes into this with eyes open. Ιf you look at -- look at the last paragraph of what you just approved on deliverables, and the -- 25 cases every two months is mentioned in here. looked at this in terms of Board panels. example, if we had three Board members per panel plus a contractor, let's say, but -- and I don't know what you're thinking in the working group, but as an example, then each panel would have say six cases every two months or about three cases per month to review in detail. That would be each Board member, four panels of three, for example.

Or if you wanted a lighter load, you might

1 have two Board members per panel with a 2 contractor. That means each panel would have 3 about four cases per month -- or per two months, or about two cases per month, every Board member, 4 5 to review in detail. This is not a trivial task, 6 so what --7 MR. GRIFFON: No, and it's good to point that 8 out. I mean it's not a trivial task, it's --9 DR. ZIEMER: What were --MR. GRIFFON: -- it also is --10 11 DR. ZIEMER: What was the working --12 MR. GRIFFON: We're signing off --13 DR. ZIEMER: -- group thinking about? 14 MR. GRIFFON: -- on these, you know, so --15 DR. ZIEMER: The bigger the panel, the bigger 16 your workload. If you spread it out to smaller -17 - like two Board members per panel -- then you 18 lighten your workload. MR. GRIFFON: Yeah, I mean we -- we can move 19 20 to that procedure. It does suggest --21 DR. ZIEMER: It's open-ended --22 MR. GRIFFON: -- two. 23 DR. ZIEMER: -- right now. 24 MR. GRIFFON: It does suggest two people per 25 -- it does suggest --

DR. ZIEMER: Right.

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MR. GRIFFON: -- I think two members.

3 4 DR. ZIEMER: Right. Which I think gives you about two cases per month that you would be

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personally responsible for. Is that -- was that

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your thinking? That's how it calculates out, as

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far as I could see. Okay.

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Tony, you had a comment or question and you got cut off there, I think. Or did you?

DR. ANDRADE: Well, we were I think just about to start discussing the process for case selection, and I think we're -- we were focusing in on the -- on the idea of developing a matrix that would list the types of cases, basically, that the contractor would be reviewing. just going to suggest that, number one, I think that a rough matrix has already been developed and I think Mark actually took a stab at that. And indeed, given the dose reconstructions that have taken place to date, you're not going to be able to fill out that matrix in a way that really starts to populate all of the areas. So I think that -- in my judgment or in my opinion, in any case -- it would perhaps be best to develop this task, because we don't have to issue all the

tasks at once, but develop this task over time, perhaps developing this to a point where it can really be released to the contractor, by the end of the year when we expect to see several facilities and site profiles developed and thereby different types of dose reconstructions done. So all I'm asking is that -- or what I'm suggesting for consideration is that we might think about this, defer discussion and develop this task for issuance at a later date.

MR. GRIFFON: Can I take a stab at -- let me just take a stab at first explaining the -- the matrix I'm describing would be -- it wouldn't -- there's two parts that I was suggesting, this tracking and -- if it wasn't so raw I'd discuss it here, but I didn't even circulate it to the working group. Two parts, one would be develop the matrix on the existing cases that -- that are in NIOSH's system. And that doesn't mean just approved cases, but all -- all the ones in the hopper, sort of. And then the idea -- then the second part of the contractor's requirement will be to track -- so that -- and the intent here was that we may have 300 or so coming from Savannah River up front, and they may be the only ones in

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there. But we don't want to -- you know, we may only want to sample certain ones of those, so we'll only fill certain fields. And we may have to slow down our review until we get other types of cases. We don't want to over-populate in one field or another. But I think it would be useful up front to get a snapshot of what types of cases are out there, and then we can refine our stratified sampling strategy based on what -- you know, what -- what the matrix looks like, the up front 6,000 or so cases in the system look like. So that -- that -- it's kind of two levels of that. And I thought they'd do the up front part initially. And this tracking task is not ready to -- you know, for the Board's approval now anyway, so it would -- it would wait a little here.

DR. MELIUS: Yeah.

DR. ZIEMER: Jim and then Roy.

DR. MELIUS: Mark and I talked about this a bit last night, so -- the only place I'd differ with what Tony was saying was I think that -- it's not clear to me from looking at the database getting my training yesterday morning that all the elements that we may want to select on or

track on are readily available for selection.

And I think that -- I don't think -- I agree with

Tony, we're not going to be able to select until

the end of the year and we have everything -- you

know, enough cases completed out there to do

that. And I think Mark's right, given the way

they're being done in batches, it's not going to

be -- you know, we were sort of assuming it'd be

sort of a random group to be selecting from.

They're not. They're going to be done in batches

and so that's going to complicate things even

further.

However, I think we may want to consider either one of two things. Either one is an early task for the contractor to go out and examine the database, work with NIOSH and see how certain information is available, what would be feasible and easy to select on when we're choosing cases - you know, what would be potential procedures, so we don't develop a selection procedure that is going to be very burdensome for -- to do, or impossible. Or the alternative to that is the task group, when you're meeting, if you have time, is to do that 'cause I don't think it's that complicated 'cause it's so much looking at

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the database structure, but -- seeing how it might be done. But either one of those I think would be helpful to do before the end of the year so that when the end of the year we can then more fully develop a way of selecting the cases. But a lot of the information we want is contained in documents within the database, so it's not easy -- necessarily easy to select from. There's also problems with people with more than one type of cancer and people that worked at multiple facilities that complicate the -- some of these -- these issues. So you know, selecting someone from Savannah River or whatever may not be as easy as it may seem. And that may vary depending on the site and so forth, so I think either of those alternatives ought to be looked into. don't know whether we need to do it today or when the work group meets, but I think it might be helpful before we get going.

DR. ZIEMER: Roy and then Larry.

DR. DEHART: Trying to get a handle on when the reality of having cases available for us specifically to review, I think we need to remember that these cases are cases that have been finalized. I'm not sure whether that means

1 finalized by Congress. Don't they have a period 2 of time to review, as well? 3 MR. ELLIOTT: Congress? 4 DR. ZIEMER: The cases may have a period of 5 time for appealing and there may be an issue 6 there. 7 Somebody reviews --DR. DEHART: DR. ZIEMER: Is there --8 9 DR. DEHART: -- this case beyond us. 10 DR. ZIEMER: Is there an appeal period after 11 adjudication? 12 DR. DEHART: So it --13 DR. ZIEMER: Sixty days after? 14 MR. ELLIOTT: They can get actually to 60 15 days. DR. DEHART: Yes. 16 17 MR. ELLIOTT: But it's not -- Congress is not 18 involved in this. You're confusing it with the 19 SEC process --20 DR. DEHART: Yes. 21 MR. ELLIOTT: -- I think. 22 DR. DEHART: So when would we anticipate 23 having cases ready to review then, for us, that 24 have gone through everything and the decision has 25

been made? First of the year, or is it even

1 going into the winter? 2 MR. ELLIOTT: We're looking into that, 3 because there --4 DR. ANDERSON: First of the year is winter, 5 for many of us not from Tennessee. 6 MR. ELLIOTT: Recall that you're to re-- your 7 audit is to look at final adjudicated cases. 8 DR. DEHART: Right. 9 MR. ELLIOTT: Those that have achieved that final status where either they've been deemed 10 11 compensable or non-compensable. And if they're 12 non-compensable, there's no -- evidently they're 13 you know, they're not in an appeal stage. 14 they're in an appeal stage, that's still tied up. 15 DR. DEHART: That's correct. 16 MR. ELLIOTT: And there's -- there's some 17 issues associated with -- I'm just blanking on the terminology, help me out here. 18 19 MR. NAIMON: Challenges in court? 20 MR. ELLIOTT: Well, challenges in court, but 21 there's the life of the claim, until it's no 22 longer -- what's --23 MR. NAIMON: Statute of limitations. 24 MR. ELLIOTT: Statute of limitations on the 25 claim, which is much too long, as we know it to

be. Six years is too long for you to wait.

Okay? So we've got to do a little homework and we've got to coordinate with the Department of Labor on this as to when a case has achieved a point of adjudication that can be audited. Okay? So we're working that issue. I don't know if that answers your question clearly or confusingly, but we don't have a final answer yet. We're working --

DR. DEHART: It sounds like that we have several months yet to -- before there's an issue for us to --

MR. ELLIOTT: Well, certainly we don't anticipate compensable cases to be contested, and so there are a number of -- you know, right now we're -- I think we're around 45 to 47 percent compensable in the number we have done. That doesn't mean all those have reached that final adjudication point. There's some of those still in recommended decision. But by the end of the year, yes, I think you'll have a goodly number to look at.

DR. DEHART: Thank you.

MR. ELLIOTT: I would also like to comment back on something Mark said a minute ago that --

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1 what's in the hopper, not what's final, not --2 you know, let's take the number 13,500 that's in 3 the hopper right now to be done and -- to put a matrix together. I don't believe that is your 4 5 contractor's work. That is our job. I think 6 that we have a robust data tracking system. 7 it does not right now drill down to some of the 8 things you want, and Dr. Melius knows this from 9 his training yesterday morning. This was a topic of discussion we briefly had that right now we 10 11 can't produce a report from that system that says 12 how many lung cancer cases do we have for a given 13 I think -- well, we might be able to do site. that, but it'll -- it takes a little bit of labor 14 15 right now, we -- so what I'm proposing is that 16 you come to grips with what you're matrix is going to contain and tell us what those 17 18 parameters are that you want to see populated 19 eventually of what's in the hopper, and we'll 20 have our IT staff work to put that into place. 21 DR. ZIEMER: Thank you. Other comments?

DR. MELIUS: Yeah.

DR. ZIEMER: Jim.

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DR. MELIUS: I'll just follow up on that. I appreciate your offer to sort of change your

database for our purposes, but I think it would still work better if it were a little bit more of an interactive process 'cause it may very well be possible to select cases based on things that are already in the database and not make extra work for you in order to do that. At the same time, I think if we did it sort of jointly in some way rather -- that's -- may be things that would serve your purposes, also. And it may turn out that all these things would be helpful for you, too, to have information on, so I still think we should try to work together on it and coordinate what we're -- what we're doing in that regard.

In regard to Roy's comment and so forth, I -we're going -- the work group may need to spend
some time on this, but I'm not sure we have to
wait until we get to 3,000 or 4,000 or whatever,
certainly for some of the early reviews and so
forth that -- you know, it may be a number
shorter than that that we're going to feel
comfortable sampling from. I think all of us
know that right now if we sampled randomly we'd
see a lot of Bethlehem Steel. And you know,
maybe it'll be -- next a lot of Savannah River
with Bethlehem Steel or whatever. But I still

think there may be enough to certainly start a review process short of having -- you know, maybe it's a very small sample we'll take from that, but I think we can get it going and I'm not -- I worry that, given all the procurement and other bureaucratic hurdles we have ahead of us that -- I don't think we should count on we don't have to do anything till next April, and I don't think that's what you were suggesting, but that we, you know, recognize that it -- we get the process going and get things in place, it'll be easier.

DR. ZIEMER: Henry.

DR. ANDERSON: Yeah, I would suggest we have a pilot phase and then we'll have a production phase. In the pilot phase we don't need to worry quite so much about the rigorous sampling framework. I think with what we have, we ought to get started as soon as we get the contractor going and get some sense of --

DR. ZIEMER: Right, some experience.

DR. ANDERSON: -- how we're going to do this and what are the issues, because -- rather than to try to spend a whole lot of up-front time finalizing something that, once we start it, say that this is unworkable. And then you're -- so

let's start with some -- we may want to do a
batch of 25 or so and then have a month or two
delay while we process those.

DR. ZIEMER: Yeah, or even less. And I think, Jim, what you were suggesting sounds very much like a pilot program, anyway. Yeah. Other comments?

MR. GRIFFON: Just to go back to that -- the matr-- I mean we do have some draft parameters, but I agree with Jim that when -- I would volunteer the working group to come out soon, and that could be one of the issues that we can take up when we're sitting in front of the database and thinking about this. You know, some parameters -- it may get us to the same place, I'm not sure, and if they're very difficult to sort on, we could probably not -- necessarily need to use, you know, those. So I think it could be an interactive process.

DR. ZIEMER: Okay. Henry, did you put your flag back up or is that --

DR. ANDERSON: No.

DR. ZIEMER: -- just left over? Okay. Mark, do you have other items then from the working group to --

MR. GRIFFON: Yeah, just to -- I think we've sort of danced around it a little already, but the procedure that went around last night, I think it would be worthwhile to step through that. This is the three -- three-page procedure for processing individual dose reconstruction reviews, which touches on some of the things we've been talking about already, but --

DR. ZIEMER: Do you have extra copies of that?

MR. GRIFFON: No.

DR. ZIEMER: I had it 'cause I wrote my comments on it -- that's all right. Does everyone have a copy?

MR. GRIFFON: I can -- I can call out some things from our discussion this morning that -- you know, just --

DR. ZIEMER: Sure.

MR. GRIFFON: And then give you more time to read through it, but we -- if you look down at the fourth bullet there, interface of Board and contractors with relevant experts -- and I think it goes on to say and individ-- or individual claimants. I have a modified draft, so -- and that interface with individual claimants, I think

that is something that -- that's still -- you know, needs to be discussed and maybe it can be deleted from this process and handled separately and, you know -- so just to highlight you on that, that's that re-interviewing question that we have. If you --

DR. ZIEMER: Did you say in your current version you've actually deleted the individual claimant state--

MR. GRIFFON: I've highlighted it.

DR. ZIEMER: Oh, highlighted --

MR. GRIFFON: I think from this process we may, you know -- depending on how we want to handle that -- that whole question, it may not be part of -- you know, it's not part of the dose review process right now, and this ties into the dose review process.

DR. ZIEMER: Right.

MR. GRIFFON: So maybe it needs to be deleted, yeah. Yeah. In section B we had a fairly lengthy discussion on this. This brings up the 25 cases every two months. I thought it did say two, but apparently it does not say two rotating members. It just says --

DR. ZIEMER: There was no number there.

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MR. GRIFFON: Right.

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That's why I was trying DR. ZIEMER:

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different combinations.

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MR. GRIFFON: I guess it was in other discussions that we said two, but -- I added on a few sentences under this about some items that we brought up in our working group discussion this morning. One is that the Board needs a conflict of interest plan related to our review work. the second thing was -- oh, that -- the second thing was that -- this was the questions of the privacy thing and the idea that these rotating members could work with the contractor and have in-depth discussions about individual cases. in the -- in the summary report that came to the full Board meeting, we would have the -- Privacy Act rules had to be adhered to and therefore you'd only be presenting summary information and nothing that could reveal the identity of an individual claimant. So we highlighted that in that section just to make sure.

We put -- we talked about a potential that if -- you know, we said that it may go down this path where other Board members that weren't the designated two or three may start questioning,

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and they may want more information about individual cases, and we started discussing the notion of, you know, would it be possible to go into executive session for the full Board to discuss individual cases where privacy -- you know, where you were potentially talking about identifiable information. So that -- that -- it was sort of those items was the potential that we could go into executive session to discuss individual cases, as -- as -- as deemed necessary by the Board. But generally the idea was that the in-depth discussion would be between the designated members for those cases and the contractor. Then the summary report that came to the full Board would be Privacy Act -- you know, would only be general summary findings. It would not reveal any privacy information.

DR. ZIEMER: Comment on that by Larry.

MR. ELLIOTT: Yes, I would like to comment on that, just for your edification. It certainly could happen that way, but to go into executive session you'd have to have it announced in advance. Certainly any Board member that wanted to see any individual claimant's administrative record, we could accommodate that, you know,

separately from the Board meeting. But to go into executive session, there's -- we have to get a waiver to do so and we have to announce it in Federal Register notice in advance of such happening.

DR. ZIEMER: Yeah -- and comment?

DR. MELIUS: That last, Larry, a question on that, and maybe the attorneys can help, maybe they can't. Can you have -- given the nature of the work of the Board, have a provisional executive session announced that it would be included in the schedule and that for each meeting we could have a hour set aside for -- that would involve the review of confidential information. We could specify what might be entailed would be for this process.

MR. ELLIOTT: We're looking into that. It's not only -- you know, it's FACA-related and also legal-related, so we have to get some questions answered, and we're working on that.

DR. MELIUS: I guess my ques-- I guess my
request is to look into that, that's all.

MR. ELLIOTT: And we are.

MR. GRIFFON: I guess that -- that was the notion raised by that -- actually Roy brought up

1 that idea of having that standing -- having it be 2 a standing executive session, yeah. DR. MELIUS: I didn't think I'd be original. 3 4 DR. ZIEMER: Proceed, Mark. 5 MR. GRIFFON: In section D, item D.3, again 6 this relates directly to the re-interviewing, and 7 I've highlighted it for potential deletion as it applies to these dose reviews under this task 8 9 since we're not re-interviewing. 10 DR. ZIEMER: So item D.3 currently is being 11 deleted? 12 MR. GRIFFON: Yeah. 13 DR. ZIEMER: On item D, Mark, I wanted to 14 ask, where you say experts in item 1, and you 15 have, quote, experts. 16 MR. GRIFFON: Right. We don't define it, do 17 we? 18 DR. ZIEMER: Does that mean -- what does the 19 quote mean here? For example, are workers 20 considered experts in this context, 'cause that's 21 what you've listed, amongst other things. 22 are experts in their own way --23 MR. GRIFFON: Yes, yeah, that was --24 DR. ZIEMER: -- was that the intent? 25 MR. GRIFFON: Right.

1 DR. ZIEMER: That this is experts, considered 2 in a very broad sense. 3 MR. GRIFFON: Right. 4 DR. ZIEMER: People with --5 MR. GRIFFON: Shop floor, 30-year --6 DR. ZIEMER: -- special knowledge --7 MR. GRIFFON: -- experience and -- yes. 8 DR. ZIEMER: Okay, I just wanted to 9 understand the --10 MR. GRIFFON: Right. 11 DR. ZIEMER: Right. 12 In item E, number 4, I added a MR. GRIFFON: 13 similar line, but we also have to look into this 14 again, that the Board may consider a standing 15 executive session for more in-depth discussion of 16 individual cases, so that's item E.4. I want to go back, though. 17 DR. ZIEMER: 18 MR. GRIFFON: Okay. 19 And this may require legal DR. ZIEMER: 20 advice at some point, but can we legally go back 21 to any experts, whether it's workers or worker 22 representatives, and discuss any particular case 23 with them? And I just raise that in terms of 24 privacy issues. I can understand talking to 25 people about say site profiles. But if we're

1 looking -- reviewing a case, John Doe, John Doe's 2 claim, in what way can we talk to a technical expert -- or any expert -- on that claim? 3 4 MR. ELLIOTT: You can talk to them about the 5 generalities of the claim. You cannot speak to 6 them about the individual by name, Social 7 Security number. You could talk about generalities like job title, years employed, 8 9 facilities worked in, those kinds of things. you can't reveal privacy information. 10 11 MR. GRIFFON: I think maybe we need to 12 clarify that, but that was the intent. It wasn't 13 about -- it wasn't intended to have meetings with 14 experts to discuss a particular case, but rather 15 background information related -- potentially 16 related to that case, without identifying the 17 individual.

MR. ELLIOTT: Right. When we go after coworker interviews, we have to do so with a waiver from the claimant.

DR. ZIEMER: Specific from the claimant.

MR. ELLIOTT: Right, and --

DR. ZIEMER: But here you wouldn't be able to
do that.

MR. ELLIOTT: We wouldn't invoke that at this

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1 point. 2 DR. ZIEMER: So this would pretty well be restricted to something that would look a little 3 more like site profile type of information --4 5 what kind of work was being done by -- you could 6 probably say by mill workers in some areas. 7 DR. MELIUS: (Off microphone) Target a site 8 profile. 9 DR. ZIEMER: Yeah, right. So it's in that context that -- if in fact you had to do this, 10 11 that it would be ... 12 MR. GRIFFON: Just to continue -- is it all 13 right to continue on, Paul? Is --14 DR. ZIEMER: Sure. 15 MR. GRIFFON: E.6, I think it says on a 16 periodic basis, and to make that consistent with 17 the task that we just approved, I put on a semiannual basis. 18 Then on F.3, I modified that to say the full 19 20 Board, along with the contractor, will develop 21 semi-annual reports for HHS. And then similar in G.3, corrective actions 22 23 in their semi-annual reports, the last sentence 24 in G.3.

DR. ZIEMER: Okay, are there other comments?

MR. ELLIOTT: Could I make a suggestion on the last one there where you're going to bring recommendations to NIOSH? I would certainly hope that if you find something in your audit that is a deficiency that we could correct, you'd not wait.

DR. ZIEMER: Right.

MR. ELLIOTT: You'd let us know. So maybe if you could think about an edit to that sentence that would allow you to report sooner than -- you know, at whatever time information becomes available or...

DR. ZIEMER: The intent particularly would be for corrective action recommendations should be made in a very timely fashion.

I want to ask again on this procedure, Mark, it's probably not so critical that this necessarily be approved today, but we at least want some preliminary indication from the Board that this is going in the right direction, that it's covering what we want and so on.

I want to raise an idea for people to mull over and cogitate with respect to the issue that you've currently deleted here and that's the issue of the interviews. It seems to me that --

well, I have had a personal objection to the idea of going back and talking with people after cases were closed, and tried to think about how we might accomplish the evaluation of the interview process that we talked about without having to go back and interview people after the fact. And recognizing at the same time that NIOSH would be very concerned about taping all interviews and that kind of thing, here's an idea to think about.

What if NIOSH were to consider taping or recording or transcribing a small fraction of the interviews, perhaps two to three percent, on a random or similar basis, so that, for their purposes, there could be an internal quality control and for our purposes there could be a record for which -- against which the summary interviews could be in fact compared. The idea then would be that the burden of recording everything would be decreased to a very small level -- and again, NIOSH would have to consider this and see whether it's feasible. We would have a specific record of the interview against which summaries could be compared.

Now it seems to me that this could meet our

needs as well as being actually somewhat useful to NIOSH in showing that they have in place an additional quality review process. In fact, I guess I would argue -- and I think we heard counter-arguments before. I would argue that this would help NIOSH in cases where appeals occurred.

In any event, that's the idea I wanted to float and to get -- kind of get a reaction from people, both staff, Board members, as to whether or not that would be a -- a way of coming at this thing without having to open the cases in the sense of going back to workers and reinterviewing them after the fact, which we said was only for the purpose of validating or evaluating the review -- or the interview process, in any event.

So now that -- you all have stunned looks on your faces, but I -- and maybe -- maybe you just want to cogitate on that and think about it and react next time. Henry?

DR. ANDERSON: I thought we'd talked about that or made that as an option or a proposal earlier and it was --

DR. ZIEMER: I don't recall.

1	DR. ANDERSON: Maybe it was in the work
2	maybe we just talked about it, but I
3	MR. GRIFFON: We talked about transcripts,
4	but not blanket, I guess, was really
5	DR. ZIEMER: I'm talking
6	DR. ANDERSON: Yeah, I mean I would
7	DR. ZIEMER: I'm talking about a very small
8	sample of approximately two percent, which could
9	serve our purposes as
10	DR. ANDERSON: I would think that would
11	DR. ZIEMER: In fact
12	DR. ANDERSON: that would work.
13	DR. ZIEMER: In fact, one could take that
14	sample and do a separate study audit the
15	interviews aside from the case audits.
16	DR. ANDERSON: Right, yeah, I mean that
17	DR. ZIEMER: 'Cause not ever case that we
18	audited would have
19	DR. ANDERSON: Right.
20	DR. ZIEMER: necessarily such an
21	interview, but one one could even do a
22	separate audit study.
23	DR. ANDERSON: Sure.
24	DR. ZIEMER: It's just an idea. Okay. Jim.
25	Oh, Henry, you still on? Okay. Jim.

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DR. MELIUS: As you probably know, I feel very adamant that we should be going back and re-I think it's a valuable source of interviewing. information. But I also think -- I know other people feel just the opposite and I think that we ought to be exploring alternatives like that as part of our -- my concern is the -- we need a process to make sure that the interviews are collecting the appropriate necessary information and that there needs to be a -- both an internal process within NIOSH for continuing to improve those interviews and gather more information, as well as our ability to review that. My position that we need to go back and re-interview would certainly be modified or could be modified, depending on what NIOSH's own process was for monitoring, as well as improving, you know -steps to improve the interview process. think something like that certainly is worth exploring, if it can be. As I said, following --I mentioned it before, it was sort of rejected out of hand, so we really haven't explored that and certainly be willing to do that.

I'd also think that maybe something that -- I don't know whether it's part of Mark's group or

whether we want to set up another working group that might really focus in on this whole issue, not just from the perspective of the -- of our review of the process, but what could be done to improve the interview process, and maybe have that group report back to -- to the Board. There may be altern-- if not -- strongly objects or cannot do this recording, then maybe there are other alternatives that ought to be looked into and we ought to be -- I think if we had a work group we might be able to, you know, explore those, present those and have a more complete discussion of this issue.

DR. ZIEMER: Okay. Wanda?

MS. MUNN: It occurs to me that such a record might also be helpful to us early on in determining whether there is some trend with respect to the reaction of people who are being interviewed relative to the completeness of the questions that they're being asked. If, for example, in the first half-dozen interviews you have two or three people who say well, why didn't you ask me about something, then that might, as you said, serve as an additional quality assurance flag for NIOSH and as an information

item for us, as well. If we don't have negative
reactions from potential claimants to having that
done, it seems to me that it would -- would serve
multiple purposes and probably save a great deal
of time. Re-interviewing sounds like a very
tedious and very touchy item to me.

DR. ZIEMER: Incidentally, this could only be done I think with the interviewee's knowledge.

That is, they would have to be told that -- well, as I would envision it, it would be one of those things where both the interviewer and the interviewee would be told that the interview may be taped or recorded for quality purposes. But it would be important that the interviewer not know that it was that -- that specific interview was being taped, and also that the interviewee had the option of saying I do not wish my interview to be taped. I think that would be important.

MS. MUNN: Or conversely, if the interviewee chose to record the conversation themselves, they could -- they would be free to do so.

DR. ZIEMER: I think we heard yesterday that that may already be happening. Okay. Yes, Larry.

MR. ELLIOTT: If I could, I'd like to offer another option for your consideration, keeping in mind that it's an audit that you're performing, an audit of the process, an audit of the quality control and quality assurance measures that we have in place. We welcome that. I want that. I want to know where we're deficient and I want to improve. If you hear resistance in my voice, as you've heard before, I'm not happy about going back to claimants after the fact and interviewing them. I have never said it's off the table, but I've almost said that. I'm almost saying that right now.

The offer I would make to you is, as part of your audit, you and your contractor could observe the interview process, follow it through to the end. There's down sides to that, as well.

There's perhaps advantages. So I just offer that for your thinking.

I would also encourage staff and counsel to speak their minds about this issue because there has been considerable discussion, debate, concern. And as the person who identified interviews as something that I wanted in this program, I am very much interested in seeing us

do the best that we can with interviews. There's no requirement in the statute for interviews. This came from me. And I'm not trying to toot my own horn here, but as an industrial hygienist, I believe that the experts on the shop floor should be heard. I believe that a worker who worked within a process, whether that's a reactor operator or an electrician or a painter or whatever, we should hear how they viewed their work experience. And that's the interest that I had in making sure that we had this interview opportunity. People can make a lot out of it or they can belittle it. We've had some gains and some advantages and some benefits from the interviews that we've conducted. In many cases, we've not. But in those that we have, I think it's beneficial that we do it and we do it right. So I encourage you to think about this. I

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So I encourage you to think about this. I encourage you to think of ways that we can do this and perform your audit that will identify ways that we can improve the process without touching the claimants after the fact. I just don't see any benefit or good to doing that.

So again I've spoken my mind. I wanted you to hear that. I encourage staff to speak up.

Staff and counsel can identify issues that they know of associated with not only going back to claimants after the termination of the case is made, but also with regard to taping everybody, taping two percent, what have you -- whether it's you observing. I'm sure there are issues they can identify with that, as well as you can. So thank you. I encourage you to consider the options available here and keep pursuing this because I want to hear where we can improve.

DR. ZIEMER: Mike Gibson.

I appreciate Larry's position on MR. GIBSON: that, and if I understood Dr. Ziemer right, this two or three percent would be all that our contractor may be re-listening to after the fact. And if I understood Larry right, it would be maybe a Board member and one of our auditors or something would sit in on the conversation. And it seems to me that, based on the reaction we've heard from a lot of the public, that that may intimidate them even more. I mean I've felt reactions like they're up here blaming the Board for what's going on instead of -- not the system we're trying to implement. And it looks like to me it may intimidate them even more in being

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forthcoming with information. It's just a -- my thoughts.

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DR. ZIEMER: Larry, you were talking about having Board members there observing the phone conversation. The presence of those Board members would have to be made known to the interviewee, as well, perhaps, I suppose.

MR. ELLIOTT: Well, you know, I --

DR. ZIEMER: Well, we don't know --

MR. ELLIOTT: I obviously haven't -- I haven't thought through this myself, and we have had Board members, as you know, some of you have observed some of the interviews, overheard them, sat with the interviewee and the interviewer. think it would take perhaps some legal review to determine whether or not -- in order to prevent bias of the interview process -- that you could do this, you know, on line without the interviewer or the interviewee knowing. I don't know if that can be done or not as part of your Maybe it could be done with a simple statement at the start of each interview that this -- and we are -- we are -- in our process, we are listening in to interviews for quality purposes. So you know, we could look into that

if that's an option that you want to pursue and
you think you're interested in. But it'd take a
little more work and thought I think to put into

play -- as any one of these options would.

DR. ZIEMER: Robert?

MR. PRESLEY: I really don't think that it would -- that the people would be intimidated by it. I actually think that some of them out there might be glad to have a Board member listen to where that they would know that we were taking an interest in something that they were doing or saying. I don't -- I don't think it would intimidate people at all.

DR. ZIEMER: Thank you. Henry?

DR. ANDERSON: I guess what -- one thing that would be helpful is when -- right now NIOSH is already sitting in on some of them for quality control. Are notes taken? Do you parallel fill out the form? I mean going through the interview form that's now kind of on line and the database, clearly there's a lot more discussion that went on between the interviewer and the interviewee that gets converted into a check box. And I guess one of our issues in the audit would be that kind of winnowing process, was that done

consistently and appropriately. One way to evaluate it is if the individual writes back saying gee, I told you about XYZ and you didn't include it. That is easy -- you can easily see that.

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On the other hand, if somebody's listening in and is parallel filling out the form or writ-taking notes, then if those notes were available, you'd be able to make those comparisons versus passively listening, which would be more is the person's demeanor appropriate, are they belittling the person or are they being supportive and are they good interviewers. That clearly is -- you know, a NIOSH activity more than us, are they doing it -- but if there were notes, that I guess is -- and does the interviewer take notes besides just on the CATI system or how -- how is that done? I mean it's -- I guess our concern or my concern is about potentially information lost, that you're listening to this interview and you're writing down what you think is important and somebody else might view -- that's information that, boy, because you have special knowledge, is useful.

MR. ELLIOTT: Well, I think all of that would

-- would be examined in your audit and would be evaluated appropriately. And certainly, you know, what -- whatever quality assurance process that we have, as well as -- we look at quality control being different than quality assurance. Quality control is as you're working through, developing a product, you make efforts and take steps to assure your quality is in control. At the end of the process, you evaluate has your -- is the quality that you wanted to achieve there, you assure your quality at the end. And all of that certainly would be fodder for your review and the audit.

Let's be clear on one thing, though. The claimant controls this. The claimant has the opportunity to come back and say hey, I told you about this and you didn't capture it in my report. And you can see how many times those edits have been made to make corrections based upon claimant interest. I think it's there. I think you need to go through the process of the audit, the practice of the audit, figure out what areas we can improve upon and where we're deficient and certainly be very much welcome of that.

DR. ZIEMER: Tony?

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DR. ANDRADE: Thank you. Larry, the first order, I think you're absolutely correct. That type of analysis is easily done and should be done and should be part of the independent review process here.

However, I really like your idea about perhaps observing and/or sitting in on -- listening in on conversations in which the interviewee has agreed and would really like to have a Board member sitting there. I think both Bob and Mike are correct. There's going to be some people that are just not going to be comfortable speaking to two people. And in other cases, there are folks that would just love to tell their story to the world.

So if we could have two independent set of note-takers, as the idea was raised, and have those notes compared at the end, I think that goes into the second order -- level of information that would perhaps give us some indication as to whether one person is biased in taking down certain types of information rather than -- as opposed to the other.

DR. ZIEMER: Yeah. Tony, let me make sure

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that I understand your comment with respect to individuals welcoming a Board member being present. It seems to me we do not want either the interviewer or the interviewee to know specifically that the conversation is being audited. That has -- that can have the potential of perturbing the system that you're trying to An audit, to me, has to be blind to that. We don't want interviewers behaving differently because a Board member's on line than they would otherwise -- being nicer, being more thorough or whatever it may be. So -- and so I thought I heard you say that there would -- might be two people asking questions. I think it would perturb the system to have Board members asking -- or maybe I misunderstood.

DR. ANDRADE: I'm sorry, yes, let me clarify that. First of all, the situation would be presented to the interviewee as you might possibly be -- or information might possibly be taken by two people, and one being a Board member. And then you go through the normal interview process, but you have the second person taking down their own set of responses. Okay?

DR. MELIUS: Two comments. One is back to

the idea of parallel interviews or listening in, whatever. I think when we discussed this before at a meeting, the concern came up about this issue that we were only going to be auditing completed cases, and these would not be -- obviously be completed, so it would involve a change in that directive parameter in our audit process, so we'd have to think through that.

And I don't want to cut off discussion of this, but I do think we're going to need -- I think setting up a work group to look into this, look into what current practices are, look into the alternatives and what would -- could be done legally, what can be done programmatically and what would satisfy everybody involved. I think it would be helpful to get this moved along 'cause it's a contentious and it's a difficult issue to resolve.

MR. NAIMON: I'm not here to give any instant legal opinions, but -- no, there are no such things as instant legal opinions. I just thought I would mention to you some of the issues that are involved in -- we looked -- at some point we looked at taping in great detail. I think listening in may have -- may all have some of the

same issues. Dr. Ziemer mentioned that the validity would be significantly helped by the fact that someone was listening in not being known to the interviewer or the interviewee.

There would be a significant legal question in some states as to whether that's possible. And I think as a practical issue, when you're dealing with these different laws in different states, that you probably don't want to get into a situation where you are picking at which places you're listening in on and which places you're taping, based on where the interviewee is geographically located.

If we did have tapes for even a sample of the interviews, they potentially would have to be added to the administrative record for that claim. You also would have the possibility the claimants, when asked for their permission, would ask for copies of those tapes and so there would be an issue of providing those copies. There will be, for some people, a chilling effect to the idea that something is being recorded or listened in. For other people, obviously, they might like the idea that it's being recorded or someone listening in. I think that varies a lot

based on the individual person.

The states that have the most significant requirements when it comes to taping, there's one state in particular that has a requirement that every party on the phone call give its consent and give it on tape, so essentially what you would have is you'd have to have each person who participates say that it's okay with them, and then you'd have to go turn the tape on and say it again in order to verify that each person has in fact -- has in fact said it. And I think that would also be a protection for us in this case that -- you know, the consent would be very thoroughly noted so there's no issue later as to -- as to what that is.

So Dr. Melius was correct that this is a -this is a very complicated question. I just
thought you'd want to hear what some of those
factors are.

DR. ZIEMER: Thank you very much. Other comments? It wasn't my intent that we solve this today, and in fact simply wanted to get some ideas on the floor that at least get us thinking about some options so that we -- otherwise we were going to be very polarized. It was sort of

an all or nothing kind of thing and there are some options here that could be explored by a subgroup or something like that. Jim.

DR. MELIUS: Can I formally propose that we
do a subgroup?

DR. ZIEMER: You certainly can do that. The Chair will recognize you for that purpose. The Chair recognizes Jim has proposed a subgroup to explore possible options for the purpose of conducting the audit of the interview process.

Does that capture -- I think that --

DR. MELIUS: Yeah.

DR. ZIEMER: -- that it -- are there any objections to having such a work group? I'm just -- 'cause the Chair's empowered to appoint work groups. Richard?

MR. ESPINOSA: I'm in second on the motion.

DR. ZIEMER: Okay. It doesn't actually I don't think require a motion, but if I have -- the sense of the Board is that we should proceed with a work group. And as I say, the Chair is empowered to do that. I would be pleased to have interested individuals volunteer to be part of the work group. Rich is interested, Tony's interested, Jim's interested, Wanda. There's

1 four right there.

UNIDENTIFIED: How many can we have?

DR. ZIEMER: Five would be an upper limit -Mike is interested. Okay. Okay, that will
compose -- comprise the work group, and we can
ask the work group to report at the next meeting.
We need some staff support on that probably, as
well, and --

MR. ELLIOTT: Do you have a Chair for that?

DR. ZIEMER: I'm thinking about -- yes, we definitely have a Chair, I just don't know who it is at the moment. Does anyone want to volunteer for that job or I am glad to appoint somebody?

DR. MELIUS: (Off microphone) I'd be glad to volunteer for that (inaudible).

DR. ZIEMER: Okay, Jim has volunteered and you have -- you have the names of the colleagues. And I would ask the work group to keep the Chair of the Board in the loop on your deliberations. I also have an interest in this, but I'll let you folks deliberate on your own, but I do want to be kept in the loop on this.

Larry, is there a person on the staff that can assist them? There may be -- or at least be available to address legal/technical issues that

might arise?

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MR. ELLIOTT: Yes, we'll certainly make a staff person available. I'm not sure yet -- right now who that would be, but general counsel's also at the ready to help this work group, so David Naimon and Liz Homoki-Titus will avail themselves of the work group.

Okay. Well, the formal charge DR. ZIEMER: to the work group will be to explore potential options that the Board can consider for the purpose of auditing the interview process. I've expressed it that way because I think it might be helpful if we had before us maybe more than one possible option. You know, what are the pros and cons of doing it this way versus doing it this way and maybe a third way. But I think it's important to be somewhat creative on this. We need to keep in mind -- I think we need to be sensitive to all the issues. We sort -- you know what issues we all have with each other and the issues the staff have, and I think if we're creative enough, we can find a solution that satisfies all of our needs. The Board has certain requirement. NIOSH has some certain desires. We want to -- we want to be able to do

this in a way that's helpful to both -- all groups involved.

If we find a good process, I hope it's one that will also be helpful to NIOSH that they can use internally for whatever sort of improvement and -- continuous improvement that they might find useful as part of the process.

Now we -- let's see, we don't require any formal action on that. The work group is appointed and it has its charge and Henry and then Richard.

DR. ANDERSON: I just had a question for NIOSH. Since we heard that some of the claimants are already recording, do they say anything on the phone that they're going to record? Do they ask or -- I mean do you know -- I'm just -- this is just a point of information.

And then the other question is how many have more than one person sitting with them to assist them with their interview on the other end of -- is that identified in any way?

MR. ELLIOTT: I can't answer either question for you here today.

DR. ANDERSON: Yeah.

MR. ELLIOTT: It was news to me yesterday

that the interview was taped. My first query to folks -- to staff was go find out whether or not it's recorded on the interview itself that it was taped.

I can't honestly answer your second question, either, sitting here today. I don't have those details in front of me. We do know that a number of people -- particularly on the survivor side -- have people sit with them, people who are hard of hearing, people who can't sit for longer than an hour or who don't understand some of the questions, there've been a goodly number, perhaps, of those people having others sit in on the interview. And we do take their names. We know who -- you know, we identify who else is in the room participating in the interview.

DR. ZIEMER: Rich?

MR. ESPINOSA: Yeah, over this issue, I'd like to make the recommendation that labor unions and advocacy groups be able to -- that we solicit their comments, as well, on this phone interview.

DR. ZIEMER: I'm not sure -- and from a practical point of view, how are you suggesting this be done? I certainly glad -- we would certainly be glad to have input, but are you

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suggesting a formal process of soliciting comments or --

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MR. ESPINOSA: I think it could be done by the working group over this issue, but groups like the Los Alamos Project on Worker Safety, I'm sure that they would have a big input on how the phone interviews are going so far and what they'd like to see done, whether they wouldn't mind being recorded, as well as a lot of the other labor unions like PACE -- sheet metal workers, iron workers.

DR. ZIEMER: Okay, I understand what you're saying. I'm trying to think of how practically this could be done. It would seem to me that if -- if it's to be done, you'd have to -- you couldn't exclude -- you can't just do Los Alamos, so it's kind of an all or nothing. And I guess -- I guess -- I'm concerned about the practicality of this -- getting formal input from many groups. Those that are -- work more closely with labor --Jim, do you have a suggestion?

DR. MELIUS: Well, I guess I would just say that maybe our working group, when we present options to the Board, would -- one of the things to be considered was did NIOSH or the Board go

1 out and solicit more general input on this issue, 2 so that could --3 DR. ZIEMER: After you've -- after you've 4 developed some options? 5 DR. MELIUS: Options, and so when we come 6 back for discussion, maybe that's something we 7 could, you know, bring up in the appropriate 8 context -- may be something that NIOSH should be 9 doing or has done. You know, they may have 10 gotten comments and that may be --11 DR. ZIEMER: How does that sound to you, 12 Rich? 13 DR. MELIUS: -- and so we -- we consider it. 14 I think that's fair. 15 MR. ESPINOSA: Yeah, that -- that hits right. 16 That's fine. 17 DR. ZIEMER: At some point where we knew what 18 the options were -- I don't think at this point we want the idea to float out there that we're 19 20 proposing to record all interviews again, 'cause 21 that wasn't what -- that's not at least what we 22 talked about here, so perhaps waiting till we see 23 what the options are might be helpful. Good. 24 Thank you.

Wanda, you had a comment?

MS. MUNN: (Off microphone) No, if we're going to do it in task, that's fine.

DR. ZIEMER: Okay. Mark, I'm kind of back to your original document here. I think what we just discussed doesn't necessarily change what you have here at this point. Depending on the outcome from this other work group, you may have some minor modifications, but that -- that could be handled readily. Okay.

MR. GRIFFON: Yeah, I think we've separated
it out.

DR. MELIUS: Before we got talking about interviews, my suggestion was going to be that we give our -- I don't know if we want to call it approval, but our general agreement with this document as a sort of a structure for -- for what it's intended to do and so forth, to the extent -- and sort of ask the working group to go on to work with NIOSH and so forth, just sort of fill in some of these issues. There are some privacy issues, some FACA issues and so forth that need to be dealt with and that -- that as long as we're in general agreement with the -- what's in here, that -- and that we have not identified any other issues that we feel would -- that we ought

1	to maybe we ought to have enough permission to
2	go back and start working with NIOSH with the
3	understanding that this would be not necessarily
4	fully approved yet
5	DR. ZIEMER: All right. How about a motion
6	for provisional approval of the draft document?
7	DR. MELIUS: Just what I was thinking.
8	DR. ZIEMER: I know this is a very unsanitary
9	way of speaking, and that's taking the words out
10	of other people's mouths, but we've done that,
11	have we? Okay. That's the motion.
12	Is there a second?
13	DR. DEHART: Second.
14	DR. ZIEMER: Okay, seconded. Thank you.
15	Discussion?
16	(No responses)
17	All in favor of accepting the draft as a
18	provisional provisionally accepting the draft
19	on the procedure for processing individual dose
20	reconstruction reviews, please say aye.
21	(Affirmative response)
22	Any opposed?
23	(No responses)
24	And any abstentions?
25	(No responses)

1 The motion carries. Thank you. 2 We have three sets of Board minutes to approve. You were hoping I would forget that. 3 4 Right? 5 I was just going to ask one --MR. GRIFFON: 6 and this is sort of a process thing, too, but one 7 question for the working group. If I was considering coming to Cincinnati September 1st, 8 9 2nd, 3rd, sometime in that time frame -- it's 10 only two weeks away, but I think we need to be --11 the contract's going to be awarded soon, we 12 think, I think we have to work with that in mind. 13 And also whether any of those dates would work or 14 not work with NIOSH's staff. 15 UNIDENTIFIED: September 1st is Labor Day. 16 MR. GRIFFON: September 1st? 17 **UNIDENTIFIED:** Is Labor Day. 18 MR. GRIFFON: Is Labor Day, oh, I'm off by a 19 week. Oh. 20 DR. ZIEMER: Might I suggest that the work 21 group just work this out separately? 22 ADMINISTRATIVE HOUSEKEEPING AND BOARD WORK SCHEDULE 23 The Chair will now entertain a motion for 24 approval of the summary minutes of the 14th

meeting, which is the meeting of March 28th.

1	MR. PRESLEY: So moved.
2	DR. ZIEMER: Is there a second?
3	UNIDENTIFIED: Second.
4	DR. ZIEMER: Are there any additions or
5	corrections to the minutes?
6	(No responses)
7	If not, all who favor approval say aye.
8	(Affirmative responses)
9	Any opposed, no?
10	(No responses)
11	Any abstentions?
12	(No responses)
13	Motion carried. The minutes of the 15th
14	meeting on May 1st. This was a teleconference
15	meeting.
16	MR. PRESLEY: Move approval.
17	DR. ZIEMER: Move approval. Second?
18	MS. MUNN: Second.
19	DR. ZIEMER: Additions or corrections?
20	(No responses)
21	All in favor, aye?
22	(Affirmative responses)
23	Any opposed, no.
24	(No responses)
25	Abstentions?

1 (No responses) 2 Motion carries. The minutes of the 16th meeting held May 19th and 20th. 3 4 MS. MUNN: Move they be accepted. I've 5 provided a couple of typos --6 DR. ZIEMER: Yes, typos and so on, just pass 7 on to Cori. Motion to accept the summary minutes 8 for that meeting --9 **UNIDENTIFIED:** Second. DR. ZIEMER: -- has been seconded and -- any 10 11 additions or corrections? 12 (No responses) 13 All in favor of accepting those minutes, say 14 aye. 15 (Affirmative responses) 16 Any opposed? 17 (No responses) And abstentions? 18 19 (No responses) 20 The motion carries. Thank you. We are 15 21 minutes early on the public comment period --22 well, okay, next meeting, while Cori's getting me 23 the list. 24 (Pause) 25 MS. HOMER: Why don't you guys throw out some dates and I'll tell you whether they're
available.

MS. MUNN: How about mid-October?

MS. HOMER: Mid-October?

DR. ZIEMER: Well, first of all, we -- we can
ask the question as to whether there is a need to
meet in September. The -- we're thinking that
the contract award may come around the first of
October, apparently. Is there a need for any
Board action prior to that, Mark?

MR. GRIFFON: I just can't see us being re--

MR. GRIFFON: I just can't see us being re-I mean the work group -- I'm going -- probably
going to have some other dates other than Labor
Day now, but I mean we're going to try to meet
early September, so I would say early October or
mid-October for the next Board meeting in case we
need full Board approval on tasks or whatever.

DR. ZIEMER: Okay.

MS. HOMER: There isn't a single week in October that there's not at least two people unavailable.

DR. ZIEMER: Okay. Did everybody hear that?

There's no weeks in October where -- where at

least two people are out each -- each time. Is

that correct?

1	MS. HOMER: That's correct.
2	DR. ZIEMER: How does early November? Is
3	that getting too late? We may have to go
4	MS. HOMER: Same thing.
5	DR. ANDERSON: What about 6th or 7th?
6	MS. HOMER: What dates?
7	DR. MELIUS: 6th or 7th.
8	MS. HOMER: 6th or 7th? Tony's not available
9	on the 7th.
10	MS. MUNN: I'm not available 6th or 7th.
11	DR. ANDRADE: What day is the 7th?
12	MS. HOMER: It's Friday.
13	DR. ANDRADE: I can make myself available.
14	MS. HOMER: Okay. And Wanda, you said you
15	weren't available
16	MS. MUNN: No.
17	MS. HOMER: on the 6th?
18	Ms. MUNN: Neither the 6th nor the 7th.
19	MS. HOMER: Okay.
20	MR. GRIFFON: Can we look back at October, or
21	are people sure they can't switch I mean I
22	know we don't have a week free, but maybe people
23	can
24	MS. HOMER: The first week of October Jim and
25	Henry are unavailable the 1st and 2nd and Dr.

The second

2 week of October Tony is unavailable on Friday, Jim's unavailable all week, Roy is unavailable 3 4 all week and there are two staff unavailable on 5 the 6th. 6 DR. ZIEMER: How about the third -- how about 7 the week of the 12th? 8 MS. HOMER: That week is pretty much wiped 9 out. It looks like you guys are going to have to 10 rearrange your schedules. 11 MS. MUNN: The 20th? 12 DR. ZIEMER: Yeah, there's several people 13 unavailable that week, aren't there? What about the week of the 19th? 14 15 MS. HOMER: Henry's unavailable the 22nd 16 through the 24th, Tony's unavailable the 24th and Jim is unavailable the whole week. The last 17 18 week, Henry is unavailable all week, Gen is unavailable the 27th and 28th. It looks like the 19 20 -- maybe the 29th through the 31st we could get 21 by. 22 DR. ANDERSON: (Off microphone) I'm wiped out 23 the 30th and 31st, that's (inaudible). 24 DR. MELIUS: I'm okay the 27th and 28th. 25 MS. HOMER: Okay.

DeHart is unavailable the whole week.

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1	DR. MELIUS: Actually that whole week that
2	got canceled, so
3	MS. HOMER: Oh, it did? Okay.
4	DR. ZIEMER: So 27th and 28th, who's not
5	available?
6	MS. HOMER: Jim
7	DR. MELIUS: No, I am available.
8	MS. HOMER: He is available now. Henry's not
9	available the whole week.
10	DR. ZIEMER: Henry is not available the 27th
11	and 28th. Is
12	DR. MELIUS: Actually I'm not available the
13	27th. I'll be available the 28th and 29th.
14	DR. ZIEMER: 28th and 29th, but some Roy,
15	you're gone the 29th?
16	DR. DEHART: No, I'm good the 29th.
17	DR. ZIEMER: The 28th and 29th Henry,
18	you're you're not available at all that week.
19	DR. ANDERSON: Yeah, I'm on vacation in Italy
20	and I'm not giving that up.
21	DR. ZIEMER: Well, that's
22	DR. ANDERSON: I'll call in, though.
23	DR. ZIEMER: Okay
24	MR. ELLIOTT: Do we know Leon's availability?
25	Did he contribute here?

1	MS. HOMER: I did not get a response from
2	him.
3	MR. ELLIOTT: Okay.
4	DR. ZIEMER: First week in November again?
5	MS. HOMER: First week in November?
6	MR. ESPINOSA: What was wrong with the last
7	week in September?
8	DR. ZIEMER: Of September?
9	MS. HOMER: Jim's unavailable the 30th and
10	Roy's unavailable the whole week.
11	MR. GRIFFON: (Off microphone) And I'm not
12	available.
13	DR. ZIEMER: Mark's not available.
14	MS. HOMER: Oh, okay.
15	DR. ROESSLER: What about the week of the
16	22nd of September?
17	MS. HOMER: Henry's unavailable and Jim is
18	unavailable.
19	DR. ROESSLER: Are you in Italy then, too?
20	DR. ANDERSON: No, I'm fishing in Alaska.
21	DR. ZIEMER: What week was that, September
22	MS. HOMER: The last week of well, I have
23	the last week of September the 28th, 29th and
24	30th or the 29th and 30th.
25	DR. ROESSIER. But we were talking about the

1	22nd.
2	MS. HOMER: Yeah, the 22nd, Henry's
3	unavailable, Tony's unavailable on Friday, Jim's
4	unavailable the whole week and Roy's unavailable
5	the whole week.
6	DR. ZIEMER: First week in November?
7	MS. HOMER: First week in November.
8	MR. ELLIOTT: I appreciate the Board's
9	interest to have all members present, but keep it
10	in mind that to conduct the business of the Board
11	you don't you only have to have a quorum.
12	MS. HOMER: Yeah. Okay, first week of
13	November, Henry's unavailable Monday and Tuesday,
14	Jim's unavailable Monday and Tuesday, so that
15	leaves the 5th, 6th, and 7th.
16	MS. MUNN: I'm unavailable the 7th.
17	MS. HOMER: That's right, Wanda's unavailable
18	the 7th.
19	MS. MUNN: 6th and 7th.
20	MS. HOMER: 6th and 7th.
21	DR. ZIEMER: It looks to me like we only lose
22	one person then October 28th and 9th. Right?
23	Is that correct?
24	MS. HOMER: Uh-huh, that's correct.
25	DR. MELIUS: What if we just went the extra

1	week and we're just delaying a week to do the
2	5th and 6th.
3	DR. ZIEMER: I thought the 5th and 6th we had
4	more people missing.
5	DR. MELIUS: No, just
6	MS. MUNN: We do have more missing. I'm not
7	here.
8	DR. MELIUS: Oh, I thought you just said the
9	7th.
10	MS. MUNN: No, I travel on the 5th.
11	DR. MELIUS: Oh, I'm sorry.
12	MS. MUNN: The 6th and 7th I
13	DR. MELIUS: I'm sorry.
14	MS. HOMER: For the 6th and 7th, Wanda would
15	be unavailable.
16	DR. ZIEMER: Is that the only one?
17	MS. HOMER: That's it.
18	DR. ZIEMER: So on the 28th and 29th one
19	person unavailable, 5th and 6th one person
20	unavailable. Any preferences? We could go
21	either.
22	DR. MELIUS: Figure out the location and then
23	just some logistics. Where are we going to have
24	the meeting?
25	MS. HOMER: Yeah, we need to know.

1	DR. ZIEMER: We don't have to be in
2	Cincinnati for any reason at that point, do we?
3	DR. MELIUS: I'll propose St. Louis for the
4	location. We talked about that before and
5	continued interest and
6	MR. ELLIOTT: Looks to me like, from my
7	perspective, the 28th and 29th would be best. I
8	the 6th and 7th and the next week is not
9	good, so
10	DR. ZIEMER: Let's try 28th and 29th of
11	October. Any objection to St. Louis? Very
12	central location. Bob?
13	MR. PRESLEY: Do we need to be going back to
14	Washington any time?
15	DR. ZIEMER: D.C.?
16	MR. PRESLEY: Yes, sir.
17	DR. ZIEMER: Do we
18	MR. PRESLEY: That was discussed at our last
19	meeting. I mean
20	MS. HOMER: It's up to the Board.
21	DR. ZIEMER: We don't need to, specifically.
22	St. Louis is a potential site where we might have
23	some worker interaction, so I think that
24	certainly meets our intent. Any Cori, if you
25	would check on St. Louis and see if what's

1	available on the 28th. Is that agreeable? Any -
2	-
3	MR. ELLIOTT: Give us an alternate.
4	DR. ZIEMER: Alternate date or alternate
5	city?
6	MR. ELLIOTT: Alternate city.
7	DR. ZIEMER: Alternate city?
8	MS. HOMER: San Francisco? Santa Fe?
9	DR. ZIEMER: What about other locations near
10	sites? We've been to Oak Ridge, we've been down
11	to South Carolina. We haven't been to Richland.
12	DR. MELIUS: Yeah, Hanford's one we should go
13	to.
14	MR. ELLIOTT: Idaho.
15	DR. ZIEMER: What, Hanford in October?
16	MR. PRESLEY: We've talked about Texas.
17	MS. HOMER: I would suggest that the later in
18	the season we get, the bigger the city we want to
19	get into.
20	MS. MUNN: Yeah, but October's nice.
21	MS. HOMER: Is it?
22	DR. ZIEMER: In Hanford? Uh-huh. Hanford,
23	back-up site? Okay.
24	DR. MELIUS: Henry'll be disappointed. He
25	loves flying into Hanford.

1	DR. ANDERSON: Boy, I gotta tell you, yeah.
2	That makes it a four-day meeting, one day out,
3	one day back.
4	DR. ZIEMER: Thank you.
5	MS. MUNN: My heart bleeds for you.
6	DR. ZIEMER: Thank you.
7	MS. MUNN: It's easy to get to Richland from
8	there. The hotel will come get you.
9	DR. ZIEMER: Okay, we've agreed to St. Louis
10	on the 28th and 29th of October, with a fall-back
11	position at Hanford if St. Louis cannot
12	accommodate us in the manner to which we are
13	accustomed. Is that right? Okay.
14	DR. ANDERSON: Do you want to pick another
15	date I mean the next meeting?
16	DR. ZIEMER: The next meeting beyond that?
17	Yeah, right. Well, we probably if we meet end
18	of October, we're probably talking about
19	MS. HOMER: Possibly early December?
20	DR. ZIEMER: early to mid-December. Most
21	people don't like to schedule meetings beyond the
22	middle of December.
23	MS. HOMER: The week of the 7th of December
24	looks great.
25	DR. ZIEMER: Let's get it scheduled then.

1	All days are open?
2	MS. HOMER: All days are open.
3	DR. ZIEMER: The week of the 7th 9th and
4	10th? 9th and 10th of December. Meeting
5	location? Something a little more southern than
6	Hanford? Amarillo near the Pantex site?
7	MS. HOMER: Amarillo? Okay?
8	MS. MUNN: Let's do Amarillo.
9	MS. HOMER: An alternate?
10	DR. MELIUS: San Francisco.
11	DR. ZIEMER: Let's see, have we been near
12	Rocky Flats? Oh, yeah, we went to Denver, right.
13	Okay, we were in Denver. Are there other
14	locations that have What did you write down?
15	MS. HOMER: Amarillo.
16	DR. ZIEMER: Okay. We had a lot of
17	alternatives kicking around for a fall-back
18	place, but
19	MS. HOMER: Idaho Falls has jet service.
20	MR. ESPINOSA: Albuquerque.
21	DR. ZIEMER: Well, of course we were in Santa
22	Fe, so I'm not sure that
23	MS. HOMER: That's pretty close. I don't
24	know if you want to mix things up a little bit or
25	not.

1 DR. ZIEMER: Anything in terms of Berkeley or 2 Lawrence Livermore? Berkeley and Livermore are 3 there. 4 DR. MELIUS: Sizeable -- that's come up 5 before. 6 DR. ZIEMER: How many claims do we have out 7 there, a lot? A small number. 8 MR. ELLIOTT: Over all the California sites, 9 not even 1,000. 10 DR. MELIUS: How many we have from Pantex? 11 MR. ELLIOTT: About 1,000. 12 MS. HOMER: Would you like me to use one of 13 the other identified cities as a fall-back? Wherever we don't have the meeting? 14 15 MS. MUNN: What about Nevada? 16 MR. ELLIOTT: Let me offer something here. 17 The number of cases we have per site shouldn't 18 drive where we go. In fact, I would argue that for a site like Pantex where we're worried about 19 20 the cases coming out of that site, or Hanford 21 where we can't seem to get people to sign up --22 or DOL can't get people to sign up -- it makes 23 some sense to go. So it could go the other way.

MS. MUNN: Isn't Nevada a reasonable back-up

I mean, you know -- you know.

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for Amarillo?

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MS. HOMER: That time of year it'd be nice in Vegas.

MR. PRESLEY: You've got 400 and something

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claims at the test site.

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DR. ZIEMER: Okay, test site.

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MS. HOMER: Okay?

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DR. ZIEMER: Thank you.

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PUBLIC COMMENT

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We're right on schedule for public comment period. Our first commenter will be John Alexander, Center for Worker Health and Safety Education, I believe, in Cincinnati. And John

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Education, I believe, in Cincinnati. And John?

MR. ALEXANDER: First off, I work at the

15 16 ICWUC Center for Worker Health and Safety

Education here in Cincinnati, and I'm the United

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Steel Workers of America liaison there. I travel

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all over the country teaching health and safety,

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including many of the places that you had up on

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the screen here yesterday and today.

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And there was one item that I wanted to at least give my opinion on. I don't know what

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that's worth, but before I do that, I want to

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thank you for all the work that you guys are

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doing. I think it's wonderful that you are doing

what you're doing and I believe it's something that's certainly necessary, and it sounds like it's an astronomical feat, but it's certainly needed.

I hope I get these names right because I'm going to comment on some of the things that were said and what I think about those things. Toohey -- is that right, the fella that was sitting right over there? When he gave his presentation he talked about the committee and who's involved in the investigations, and I believe Dr. Melius brought up the point about conflict of interest. And then I think it went over to -- I've got to put my glasses back on here -- Brother Gibson and he brought up the fact about there should be some craftsmen involved in some of this discussion. And then it bounced back around and then later on today -- this afternoon Dr. Melius brought up about union representation and then Richard brought up about union representation again.

Now when Dr. Till gave his presentation -- and actually last night after I watched yesterday afternoon and listened to what was being said, I had a lot of stuff I wanted to say today, but I

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think Dr. Till hit on a lot of the points that I wanted to make and believe me, it was very refreshing to hear him speak and the way he eloquently covered the points. And I just -- and I'm sure that he had just as much effect on you folks as he had on me, and he certainly made some very good points. And I think he identified a few deficiencies that I was picking up yesterday, just being here a half a day.

And one of them is who the committee is, and Dr. Toohey -- I forget who exactly asked the question, but they asked why the committee didn't consist of -- with another representative -- union representative or representative of the employee or someone on the Committee, and his answer was because of the cost.

Now, you know -- I mean what we're doing here is we're trying to -- that was what he said, it had to do with the cost. And you can check your minutes on that. I was paying pretty strict attention to this.

But anyway, this is an investigation for people to be compensated who've been injured, possibly been injured. I mean that's what all this is about -- right? -- to determine whether

NANCY LEE & ASSOCIATES

or not they have.

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Now just for your information, I found that -- and I was trying to look for the right adjective so I wouldn't insult anybody, so I'll just stay I found it very unsettling that they didn't have the union representatives of the people involved in these committees where they're doing these investigations 'cause I am a union representative. I was the chairman of health and safety for 15 different plants at one particular time before I became a full-time instructor. And believe you me, if you aren't investigating some of the situations that took place in our facilities, I know I could add a lot of information to what actually happened as opposed to what some of the people there would tell you what happened. So -- so I'm certain that that's the case in many of the situations of these -these incidents that you're checking into.

But just out of curiosity, at lunchtime today
I went to one of my colleagues who's retired from
the government 20 years and I asked him this
question. I said if -- if you found out that you
had been overexposed to something and you
possibly had a disease because of that, and a

committee was going to be formed to determine if in fact that exposure is what caused your disease and you were to be compensated for it or not, who would you want on that committee. And his first answer -- he thought a little bit. He said well, I'd sure want my union representative there. And I started chuckling a little bit at that because he had no clue what I'm attending here or, you know, or what you guys are doing here.

And then I said well, who else would you want on that committee? And he said well, the one person I wouldn't want on there is my company's safety representative. He says and then I would want an outside source doing the investigation.

Now when you compare that to what Mr. Dewey said -- or Toohey, who is on the committee, that really makes you kind of wonder. And I went to another colleague and I asked the same question. He said there's only one person I'd want to make sure wasn't on there. And I said who is that? And he said the company health and safety representative.

Now the reason I'm bringing this up is because something that Dr. Till said. He said that what you're doing here, you should try to

have a program that can withstand the scrutiny of certain people looking at it and when it's all done to say whether or not it was done correctly, or whether or not it can withstand scrutiny. Now it would appear to me that you're missing a very vital point here, and it was brought up by some of the own people -- your own people on your panel, and when I listened to when you went over your work goals or statement of work or whatever, nowhere in there does it say anything about having the person's representative contacted or discuss the incident, but it does say any important information or whatever the exact verbiage is on there, to reconstruct an exposure.

Now let me tell you, from my own personal experience, that would include the union health and safety representative, where in fact there are unions. You did bring up the one point that the one facility doesn't have -- but they do have union personnel there, but not very many. But even there I think I'd want to talk to the union personnel.

Remember, cost -- if -- and I just -- cost shouldn't be an issue here, very much. I mean it's an issue in anything, but cost is probably

one of the key issues that got us here in the first place. And my job is to go out and prevent from happening what has happened here in the past today. And we still have the same battle going on and cost is one of the key things that gets us in these kind of predicaments. Everybody's trying to figure out how to do the job the least expensive way and not protect the workers the way they should be. And so I don't think that cost should prevent this committee from having a union representative on the committee who's part of the committee to figure out what actually happened in some of these incidents.

So if you're going to have a program that's going to withstand scrutiny, the one flaw that I've seen -- and I'm not sure that there's not other ones, I don't know. But the one flaw that I've seen that sticks out sorely from yesterday and today's conversations here is that, that's what's lacking. So that's my opinion. You can do whatever you want, but I really do think you need to reconsider the verbiage that you have here to -- to ensure that you're actually finding out what did happen. And if you're really going to give the benefit of the doubt to the worker,

as Dr. Till said -- and he gave a perfect
example, the one -- the guy with the airplane,
the mechanic -- right? He said they were giving
the benefit of the doubt to the worker, but did
they really? I mean the first cut, they said he
wasn't exposed. And if it wasn't for his own
persistence, it doesn't sound like there would
have been a second reconstruction, would there?
And on the second reconstruction, they determined
he still wasn't exposed because they really
wasn't giving him the benefit of the doubt. And
it wasn't till the third reconstruction that they
actually did figure out what did happen.
So you know, if it's going to be difficult on

So you know, if it's going to be difficult on some of these -- and I'm sure it is, on some of them -- I would think if you're going to do an investigation, you would want all parties involved. And all parties who were involved in maybe some of those incidents. Or otherwise you're losing a very valuable asset. And that's all I wanted to say. Thank you.

DR. ZIEMER: Thank you very much, John, for those comments. Ask if any of the Board members have questions for John?

(No responses)

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Okay, thank you. Eula Bingham is here today.

Dr. Bingham is from the University of Cincinnati

Medical Center. Dr. Bingham, pleased to have

you, as well.

DR. BINGHAM: Thank you. I have a couple of points, some of them really are similar to what Mr. Alexander said. The one is a point of clarification, and I guess this slipped by somebody, but I work with a group -- I'm a member of a team and John Dement*'s a member of that same team, and Knute Ringen* heads it up, and we have examined over 2,000 workers at Savannah They've been interviewed. They've had River. medical exams. And they're all members of unions, over a dozen unions at Savannah River. They are in that category of building trades. They're carpenters, they're operating engineers. We have an office there that brings in the people to interview them for the worker history. office is run by Charles and Glenda Jernigan. Charles is an electrician by trade, still a member of the union. And Glenda, I'm proud to say, is an operating engineer. So I do think that there are people there who know that facility very well.

Documentation was one of the issues that Dr. Till brought up, and I would encourage -- for the site profiles and anything else that's done -- that you need documentation. It's really at the heart of good science. And you're going to be judged on that.

Interestingly enough, the example that I'm going to give to you about documentation has to do with Savannah River. I didn't plan it that way, but that's what -- the first one that came to mind. When we were doing our investigations and coming up with a site history about three years ago, we went to Savannah River and met with some of the people there. I was not at that particular meeting, but some of our -- the rest of our group was there. And the issue of whether or not -- how many LPTs, lymphocyte transformation tests, we would do for beryllium came up. They said well, you know, there's no beryllium here, never was any beryllium here.

We had a meeting with individuals down there, many of whom were -- had to do with health and safety, actually occupational disease, as a matter of fact. Some were DOE employees and some were contractors. And they said oh, don't worry,

1 there's no beryllium here.

We said well, you know, we've got five people who are double positives on LPT tests. So they allowed as how it was probably from the fluorescent light bulbs. Somebody allowed to them that we -- they thought Harriet Hardy had done away with that 30 years ago or longer.

I will say that John Dement and I went back to Savannah River and did a site visit, and they still claimed that there was no beryllium there. We continue to have positive tests, positive sensitizations, and the production workers have them, also. So I hope that when NIOSH or the contractor gets information from a site, they will document the source, because some of your sources will tell you whatever is convenient. And not just at Savannah River, all over. So to CYA, you better document your sources or somebody is going to find egg on your face in those site profiles. Thank you.

DR. ZIEMER: Thank you very much, Dr. Bingham. Any questions?

(No responses)

Okay. Our next person --

MS. HOMER: It's Richard Miller.

DR. ZIEMER: Oh, I couldn't read the -- it's

Richard Miller. Richard. No, I couldn't -- I

wasn't wanting to recognize him.

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MR. MILLER: It's how I sign my checks. Take note and put it on the web.

Good afternoon. I would just very briefly like to underscore the question and discussion that came up regarding conflict of interest. You know, I sensed almost like the temperature went up in the room slightly when the discussion was raised about the -- just the mere disclosure or providing transparency on the potential professional conflicts of interest that might arise from those performing site profiles. One response was well, it's not in our contract. Another response was we didn't require it in our contract. And you know, this is a program which prides itself on transparency and openness and making sure things are documented and having an open process for folks to come in the room. this was the first time I had ever heard resistance to transparency. And I puzzled over it and I'm not sure I fully understand it, but let me offer some observations.

The first is is that it appears from just

these limited -- the technical basis team report
-- the report that Dr. Neton made which listed
those doing the 11 I guess site profiles, if you
go down the list you can kind of see why some of
these firms might readily be disqualified an
individuals from doing dose reconstructions under
the conflict of interest criteria that's in the
ORAU contract. In fact, they probably would be
disqualified because they are experts in
litigation defense and they would fall out on
that basis, at least with respect to certain
sites.

I had the pleasure of being on the other side of one of these experts at a site -- Oak Ridge K-25, Auxier & Associates -- and Auxier here is listed as doing the K-25 technical basis document. Now although it's a Special Cohort site, obviously there's going to be a number of claims that arise that are not SEC cancers. And I puzzled to myself and I looked at the Fernald site -- and of course Auxier was also the defense expert in the Fernald litigation, which was -- you know, led to the Fernald settlement. And I remember when Auxier was brought in in the Joe Harding* case. I mean they've got a lot of

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experience and they've -- they've been heavily I don't know about you, Dr. Ziemer, relied upon. but I imagine when you were there they were heavily used by the general counsel's office for a number of claims against the Department. so I can see why people are a little bit on edge. Mel Chew, a very reputable guy, but you know -great expert witness used in defense cases and that -- and for his firm and was used -- is to this day being retained, as I recall, in the Marshall Islands defending the Fund. And I don't know what all of the other activities are because we don't have disclosure on it, but it would seem, if the sensitivity is that there's something that probably doesn't reflect well, the answer to that is not to kind of do what DOE did all these years was to put it in a drawer and claim national security or it's in a -- you know, critical proprietary information related to a procurement or, you know, they have an array of an excuses. And I don't know that that's the right way to go about this.

Now there's really two issues that seem to -that tier from this. The first is transparency
and the second issue is what do you do if you

find something really objectionable. And there's probably a third one which I mentioned to Dr. Neton earlier, which is as a manager managing these site profiles, you should be able to at least know that if you have contractors working for you, you should know what filters they're operating with, what -- either explicit or unintentional, but you know, their basic professional training. If you burrowed into the Fernald case and spent all those years doing it, well, maybe you view Fernald a certain way and you don't have as open a mind as you might want It's not a -- it's not an explicit to have. thing. It may be just a -- you know, an unconscious thing.

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But it seems to me, as a program manager, you all at NIOSH want to know what the professional backgrounds of these individuals are because if, to the degree and extent that these are cookie cutters, or this is the dough out of which you cut the cookie is what I should say, is if you roll out the dough as your site profile and you then lay in, you know, the cookie cutter -- and I'm not sure it's going to be so simple at Savannah River as it was at Bethlehem Steel --

but you know -- and Bethlehem Steel was -- there
-- that was the dough out of which each decision
was made. There wasn't much new information
needed other than the years of employment and the
age at exposure and the date of diagnosis.

And so it's worrisome, I think, not to have that transparency and it's worrisome that the program managers aren't at least having that as a filter as they look at those working under them.

And I think it's worrisome that Dr. Toohey doesn't have that in his focal point. And so I hope that this fine point about procurement doesn't interfere with clear, open transparency on the professionals doing the work on these projects. That's -- that's my suggestion.

DR. ZIEMER: Thank you, Richard. Again let me ask if there's any questions on the part of the Board members here.

(No responses)

I have a kind of a question myself. Maybe I'll address it to you, but maybe to the Board, as well, because it came up before, and that was the fact that the site profile teams seem to consist exclusively of technical people. It's hard -- it's probably hard to find any sort of

unbiased person, whether it's a scientist or a union person or whatever, on the site. But to the extent to which one might include both, wouldn't that be of benefit, for example, if the union health and safety person from a site were included? I don't know if maybe our first -- maybe Mr. Alexander suggested that. Mike sort of hinted at it earlier in the day.

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MR. GIBSON: That's exactly what I was talking about.

DR. ZIEMER: And I think I heard Jim Neton say maybe you would want to look at that as a I don't -- it seems to me that that possibility. would make a certain amount of sense, not only to get some additional balance there, but maybe that would help. I know it's very difficult in the health physics community to find people that don't at least have sort of appearance of conflicts, even though they might not exist at the time, that have baggage and so on, either --I mean I do myself, so -- except for mine, everyone else's baggage is pretty bad, but -- I don't know, I'm -- it just occurs to me, and others can react. It seems to me it would make sense for the NIOSH staff to perhaps consider how

to address that issue.

And I guess I had always assumed that the site profiles, the editors or the authors of those would at least be identified. Are they not being identified? I know they are on this list, but in the reports themselves? No, I -- is there a reason they're not?

MR. ELLIOTT: The benefit of having these meetings are that we get this kind of input -- and very good points, you know. And we walk away from these meetings and we have a laundry list of good comments that we have to take into consideration, and we certainly will address these comments. You know, the -- let me answer your question. No, right now this is -- perhaps as an oversight on our part -- we haven't been including the authors as listed in the technical basis documents. We're going to look at that.

We're going to look at some of these other issues, like how we engage --

DR. ZIEMER: And perhaps not only transparency, but I think as Board members, we would like to know that, as well.

MR. ELLIOTT: Sure, sure, and you know, this issue of a balanced perspective, we want to

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address that. We want to look at -- at how we deliver the documents and, you know, make sure everybody understands that this is a dynamic document. The term "controlled document" I think we take away from that our experience base in government and know what that means, but on the outside, we're now I think hearing a perspective that that means something different to people on the outside and it looks like it's a closed system. Once you've got a controlled document, it's done. Well, no. We want to make sure we deliver the document in the appropriate context, that it is a dynamic document where -- maybe we got into a rush here to get the numbers done that we all want to see done. But I'm not going to make apologies for that. We're -- you know, that's why we have these meetings. These meetings are good for us in that regard. You know, we do live in a glass house, and sometimes we have to go to the toilet and I'm sure you don't want to see us do that, but you know, we're trying our level best and we do take this to heart and we welcome the input, so --

DR. ZIEMER: Appreciate those comments.

Rich, do you have additional --

MR. ESPINOSA: Yeah. On the site profiles, one of the things that I was kind of foreseeing is having a union representative or worker representative set up a worker forum for the people that are doing the site profiles, such as ORAU. That way they can -- you know, it could be site by site, facility by facility, but they could explain the -- the former workers could explain the history and the current workers can explain a lot of the history to current situations now.

DR. ZIEMER: Mark?

MR. GRIFFON: Just to -- to offer -- from our experience with the medical surveillance programs that I work on, I can say that I've done risk mapping sessions where we do group interviews.

And I've had group interviews with all former workers, which are great. But I have to honestly admit, the best sessions I've ever had are the sessions where I get former shop floor workers along with some management or supervisory people and maybe a former health physicist --

DR. ZIEMER: Together.

MR. GRIFFON: -- and the dialogue usually -- I mean it's very helpful because the workers know

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where things were, what they worked with. they know code names, and then the technical people can help me put radioisotopes with those code names. And they also -- the supervisory types -- at least when I first interview, when the interview starts, they usually start off presenting a picture of how it was on paper. And then the workers will say come on, Joe, we're all retired now, you know. You know it didn't work that way. And then they'll kind of say well, it was supposed to, but I got to admit, you know, there were many occasions when we had to go around this rule and that rule and here's sort of how it was really. So they kind of check and balance each other that way and it's very -usually the best results is when we have that kind of dynamic, so -- so I think that kind of mix would be beneficial.

DR. ZIEMER: Yeah, and it occurs to me that there may be some counterparts around these sites to the old retired health physicists -- many on that list are in that category, I think. There may be some old retired union health and safety folks around those sites that have some institutional memory that would be of value, as

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Okay. Robert.

MR. PRESLEY: Yeah, I was going to say don't -- don't leave out the retirees. They call us -they call us graybeards, but at Y-12 we have what we call the retiree corps, and they -- they take in not only our Ph.D.'s, but all the way down to our hourly people that worked on the floor. of the good points is -- is going back and talking to these hourly people. Your shop foremen, things like that, these people came up through the ranks. They started out as hourly people. Our plant manager for many, many years at Y-12 started out as a chemical operator and went all the way up to vice president of the corporation, so don't forget the retiree corps. They're there. I guarantee you that most of the places have got them.

DR. ZIEMER: Roy DeHart.

DR. DEHART: I think the issue is not so much whether it's union or not or management or not, but the contribution they can make to the issue.

DR. ZIEMER: Right. Yeah, right on target. Well, I think, as Larry's indicated, they've heard these expressions of both concern and

interest and can take appropriate action.

Are there other matters that need to come before us today?

(No responses)

Thank you very much. I think it was a productive two days. We look forward to seeing you all at the next meeting.

Oh, before you go, training session for -which people? -- Wanda, Gen, Roy and me. Is that
it? Okay -- Mike, okay. Five of us tomorrow
morning. Okay. Four tomorrow.

Okay, we're adjourned.

(Meeting adjourned 4:30 p.m.)

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<u>CERTIFICATE</u>

STATE OF GEORGIA)
COUNTY OF FULTON)

I, STEVEN RAY GREEN, being a Certified Merit

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correct transcript of the aforesaid proceedings reported by me.

I further certify that I am not related to, employed by, counsel to, or attorney for any parties, attorneys, or counsel involved herein; nor am I financially interested in this matter.

WITNESS MY HAND AND OFFICIAL SEAL this ____ day of September, 2003.

STEVEN RAY GREEN, CVR-CM GA CCR No. A-2102