THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

convenes the

THIRTY-EIGHTH MEETING

ADVISORY BOARD ON

RADIATION AND WORKER HEALTH

VOL. IV

DAY THREE

ABRWH BOARD MEETING

The verbatim transcript of the Meeting of the Advisory Board on Radiation and Worker Health held at the Marriott Metro Center, Washington, D.C., on June 16, 2006.

C O N T E N T S

June 16, 2006

TRANSCRIPT LEGEND

The following transcript contains quoted material. Such material is reproduced as read or spoken.

In the following transcript: a dash (--) indicates an unintentional or purposeful interruption of a sentence. An ellipsis (. . .) indicates halting speech or an unfinished sentence in dialogue or omission(s) of word(s) when reading written material.

-- (sic) denotes an incorrect usage or pronunciation of a word which is transcribed in its original form as reported.

-- (phonetically) indicates a phonetic spelling of the word if no confirmation of the correct spelling is available.

-- "uh-huh" represents an affirmative response, and "uh-uh" represents a negative response.

-- "*" denotes a spelling based on phonetics, without reference available.

-- (inaudible)/ (unintelligible) signifies speaker failure, usually failure to use a microphone.

P A R T I C I P A N T S

(By Group, in Alphabetical Order)

BOARD MEMBERS

CHAIR
ZIEMER, Paul L., Ph.D.
Professor Emeritus
School of Health Sciences
Purdue University
Lafayette, Indiana

EXECUTIVE SECRETARY
WADE, Lewis, Ph.D.
Senior Science Advisor
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
Washington, DC

MEMBERSHIP

CLAWSON, Bradley
Senior Operator, Nuclear Fuel Handling
Idaho National Engineering & Environmental Laboratory

DeHART, Roy Lynch, M.D., M.P.H.
Director
The Vanderbilt Center for Occupational and Environmental Medicine
Professor of Medicine
Nashville, Tennessee

GIBSON, Michael H.
President
Paper, Allied-Industrial, Chemical, and Energy Union
Local 5-4200
Miamisburg, Ohio

GRIFFON, Mark A.
President
Creative Pollution Solutions, Inc.
Salem, New Hampshire

LOCKEY, James, M.D.
Professor, Department of Environmental Health
College of Medicine, University of Cincinnati

MELIUS, James Malcom, M.D., Ph.D.
Director
New York State Laborers' Health and Safety Trust Fund
Albany, New York

MUNN, Wanda I.
Senior Nuclear Engineer (Retired)
Richland, Washington

POSTON, John W., Sr., B.S., M.S., Ph.D.
Professor, Texas A&M University
College Station, Texas

PRESLEY, Robert W.
Special Projects Engineer
BWXT Y12 National Security Complex
Clinton, Tennessee

ROESSLER, Genevieve S., Ph.D.
Professor Emeritus
University of Florida
Elysian, Minnesota

STAFF

LASHAWN SHIELDS, Committee Management Specialist, NIOSH
STEVEN RAY GREEN, Certified Merit Court Reporter

SIGNED-IN AUDIENCE PARTICIPANTS

AL-NABULSI, ISAF, NCRP
BEARD, ADRIAN G., DOC
BEHLING, HANS, SC&A
BEHLING, KATHY, SC&A
BISTLINE, ROBERT W., SC&A
BOWE, DAVID, SPFPA LOCAL 66 PORTS
BROEHM, JASON, CDC WASHINGTON OFFICE
CASEHEFFE, MIKE, CONG. HASTINGS
CHANG, C C, HHS
CHANLOW, MICHAEL, WASHINGTON POST
COHEN, SANFORD, SC&A
DEHART, JULIA, OHA INC.
ELLIOTT, LARRY, NIOSH/OCAS
FITZGERALD, JOSEPH, SC&A
FUORTES, LAURENCE, UNIV OF IOWA
GRANDE, JAMES, DOL
HAUGHLY, MINDI, NIOSH
HEARL, FRANK, NIOSH
HINNEFELD, STUART, NIOSH
HOWARD, JOHN, NIOSH
HOWELL, EMILY, HHS
HUGHES, CONSTANCE, LIVERMORE
ISHAK, LAURIE, NIOSH
JOSEPH, TIMOTHY, ORAUT
KENOYER, JUDSON, DADE MOELLER & ASSOCS.
KIMPAN, KATE, ORAU
KOTSCH, JEFF, DOL
LAM, LIVIA, SENATOR CANTWELL
LEWIS, JOHN, OMBUDSMAN
LEWIS, MARK, ATL
MAKHIJANI, ARJUN, SC&A
MAURO, JOHN, SC&A
MCCOY, EILEEN, OMBUDSMAN'S OFFICE
MCDOUGALL, VERNON, ATL
MCKEEL, DANIEL, MD, SO. IL NUCLEAR WORKERS
MICHEL, JANET, CHE
MILLER, RELADA L., NIOSH
MILLER, RICHARD, GAP
MOSIER, ROBERTA, DOL
NESVET, JEFF, DOL

PARKER, TREY, OMBUDSMAN
PLATNER, JAMES, CPWR
POTTER, HERMAN, USW
PRESLEY, LOUISE S., WIFE OF ROBERT PRESLEY
RAFKY, MICHAEL, CDC
RAMSPOTT, JOHN, SO. IL NUCLEAR WORKERS
SAMPSON, BOB, GAO
SCHAEFFER, D. MICHAEL, SAIC
SCHAUER, DAVID A., NCRP
STEPHENS, VICKIE, IAM CREST
TENFORDE, THOMAS S., NCRP
TURCIC, PETE, DOL
WALBURN, JEFF, SPFPA LOCAL 66 PORTS
WALKER, ED & JOYCE, BSAG

P R O C E E D I N G S

(8:30 a.m.)

WELCOME AND OPENING COMMENTS
DR. PAUL ZIEMER, CHAIR

DR. ZIEMER: Okay. Good morning, everyone. We're ready to start day three of this meeting of the Advisory Board on Radiation and Worker Health. We have a number of items on the agenda that we'll pick up from yesterday, and we'll come to those later, but just to call attention to the fact that the item called "Status and Planning for Upcoming SEC Petitions," that's one that we'll pick up. And LaVon Rutherford had to leave, so Stu Hinnefeld will give that report. We have discussion on the Board's use of subcommittees and working groups that we started a little bit on Tuesday, and we'll pick that up again. I'm sorry, on Wednesday it was. We didn't meet Tuesday.

And then we have the rest of the items that are on today's agenda. One carryover item was the motion on the Y-12 plant, and we'll be taking that up shortly. I understand we have written copies of the proposed motion, so -- and those

will be distributed shortly and then that will be the first thing on the agenda.

Dr. Wade, do you have any opening remarks as --

DR. WADE: No, only to point out to the Board and those interested that if you look at this morning's agenda, I built in copious time to -- to look at the sixth round selection and the reports on the second and third round. We're really going to be deferring that, so our agenda this morning -- we'll be able to catch up, at least, and then maybe even more so in terms of the day's activities. So I think we should be in good shape today.

Y-12 SEC

We will start, though, with the Y-12 SEC petition that we left off, and that requires, sadly, us to have three of our members adjourn to the front row. If they will be so kind, we will conclude our Y-12 business and we'll be back whole as a Board.

DR. ZIEMER: Yeah, we were thinking of going up to Starbuck's but I guess we'll go to the front row. So Mr. Presley and --

DR. WADE: Dr. DeHart.

DR. ZIEMER: -- DeHart and Ziemer will --

DR. WADE: The law firm of Presley, DeHart & Ziemer --

DR. ZIEMER: -- exit and I'll turn the gavel over to our distinguished Federal Official.

DR. WADE: Right. When last we met, Dr. -- Dr. Melius and Mark were going to take the intellectual discussion that had ensued and turn it into writing and a draft motion, and I optimistically assume that's where we are. So Dr. Melius.

DR. MELIUS: Yeah, I'd like to offer a motion, and I believe it's been passed out here and I believe there are other copies available. It starts (Reading) The Board recommends that the following letter be transmitted to the Secretary of Health and Human Services within 21 days. Should the Chair become aware of any issue that, in his judgment, would preclude the transmittal of this letter within that time period, the Board requests that he promptly informs the Board of the delay and the reasons for this delay, and that he immediately works with NIOSH to schedule an emergency meeting of the Board to discuss this issue.

The Advisory Board on Radiation and Worker

Health (The Board) has evaluated SEC petition 00028 concerning workers at the Y-12 plant under the statutory requirements established by EEOICPA and incorporated into 42 CFR Section 83.13(c)(1) and 42 CFR 83.13(c)(3). The Board respectfully recommends a Special Exposure Cohort (SEC) be accorded to all employees of the DOE or the DOE contractors or subcontractors who were monitored, or should have been monitored for:

(1) thorium exposures while working in Building 9201-3, 9202, 9204-1, 9204-3, 9206 or 9212 at Y-12 for a number of work days aggregating at least 250 work days during the period from January 1948 through December 1957, or in combination with work days within the parameters established for one or more other classes of employees in the SEC; or

(2) radionuclide exposures associated with Cyclotron operations in Building 9201-2 at Y-12 for a number of work days aggregating at least 250 work days during the period from January 1948 through December 1957, or in combination with work days within the parameters established for one or more classes of

employees in the SEC.

This recommendation is based on the following factors:

NIOSH found that there are insufficient bioassay or air sampling data in the available Y-12 databases to allow for the reconstruction of internal thorium exposures for employees who worked within several buildings where thorium operations took place during the time period from January 1948 through December 1957. These buildings have been identified by NIOSH as follows: 9201-3, 9202, 9204-1, 9204-3, 9206 and 9212. The Board concurs with this finding.

Finding number two. NIOSH found that there are insufficient bioassay or air sampling data in the available Y-12 databases to allow for the reconstruction of internal exposures to Cyclotron workers (employees who worked in Building 9201-2). NIOSH presented information indicating that the Cyclotron workers may have accumulated substantial chronic exposures through episodic intakes of a variety of radionuclides that were produced during the operation period. The Board concurs with this finding.

NIOSH determined that health was endangered for the workers at Y-12 exposed to thorium in these operations and for workers exposed in the Cyclotron operation. The Board concurs with this determination.

The NIOSH and Board review of the available data on operations and exposures at the Y-12 facility during the period January 1948 to December 1957 found that the data were sufficient to support accurate dose reconstructions for a number of important exposures. These include, but are not necessarily limited to:

(1) NIOSH demonstrated that sufficient bioassay data are available for reconstruction of internal doses for workers for potential for exposure to uranium or recycled uranium contaminants (plutonium-238 (plutonium-239 in lesser quantities), neptunium-237 and technetium-99) during the time from January 1948 to December 1957.

(2) NIOSH demonstrated sufficient data are available for reconstruction of internal doses for workers involved in plutonium operations during the time period from January 1948 to

December 1957 when plutonium was enriched with the Calutrons.

(3) NIOSH demonstrated that sufficient monitoring records are available for individual dose reconstructions for external doses for workers at the Y-12 facility during the time period from January 1948 to December 1957. Enclosed is supporting documentation from the recent Advisory Board meetings held in December -- held in Washington, D.C. and Denver, Colorado, as well as several Advisory Board workgroup meetings where this Special Exposure Cohort was discussed. This documentation includes a review report of the NIOSH evaluation report prepared by the Board's contractor, SC&A; transcripts of public comments on the petition, copies of the petition and the NIOSH review thereof, and related documents distributed by NIOSH and the petitioners. If any of these items are unavailable at this time, they will follow shortly.

DR. WADE: Okay, we have a motion. Do we have a second.

DR. LOCKEY: Second.

DR. WADE: Okay, second by Dr. Lockey. Discussion?

DR. MELIUS: May I just start off with one point? The section that is sort of new, not -- not sort of standardized in this, is the section at the top of the second page where we had discussed yesterday where we are presenting what we sort of can do, not what can't be done. And I think it's -- we discussed yesterday, this is not a comprehensive list of all the possible dose reconstructions, so I think tried to make that -- I tried to make that clear in sort of the introduction to that. And I think, since we're saying it's something that the -- these are just areas the Board has focused on. There are other items that I think we're sort of taking at face value, so to speak, and haven't focused on. It's not to say something's not on this list that can't be done, but these were areas where we have -- have actively reviewed and -- and been involved in. So that's why that -- just a list of three, you know, areas, but --

MS. MUNN: That's appropriate.

DR. MELIUS: -- and I tried to, you know,

convey -- convey that, and so I think we need to at least think -- think about or pay some attention to that -- that sentence. I think it's -- I think that approach is okay, but again, it is new and untried, so to speak.

DR. WADE: It would also be appropriate for the NIOSH Director to -- to look at those recommendations, and even the aspects that you didn't speak to, and possibly add more grain if he feels it's appropriate -- to what can be done.

DR. MELIUS: Explain that.

DR. WADE: Well, I mean I think what you're saying is that this is what the Board has discussed in terms of what can be done. There are possibly other things that can be done.

DR. MELIUS: And -- and I think our letter says that. These are just things that the Board has -- I mean the introduction -- I was trying to say was the Board and re-- NIOSH and the Board review. This is what we focused on as the Board -- and what the Board can say based on our --

DR. WADE: Right.

DR. MELIUS: -- that's the focus of our -- it's

not limiting to what can be done or has been done in terms of other exposures. There's lots of areas -- this facility we may -- may not have been discussed or reviewed at all, and it -- it's sort of the -- the down side of saying what we can do is it's probably impossible to put a comprehensive list. You know, a complete list.

MS. MUNN: We shouldn't try.

DR. MELIUS: Nor should we try, yeah.

DR. WADE: And my comment was to be that the NIOSH Director --

DR. MELIUS: Yeah.

DR. WADE: -- as he passes the package forward, could add more specificity to it if he felt it was appropriate, not in any way limiting what the Board said --

DR. MELIUS: Oh, okay.

DR. WADE: -- but opening up more avenues, that's all.

DR. MELIUS: Okay, that's what -- the part I wanted to make clear. Yeah -- is that -- yeah, Larry's...

MR. ELLIOTT: I was -- yes, I was just going to add to -- for clarity that while we appreciate

this language, we've looked it over, it does capture what we feel we worked through with the working group and the -- and the Board.

DR. MELIUS: Uh-huh.

MR. ELLIOTT: What -- what we could add, on behalf of the Director, is that occupational medical dose, X-ray dose, is something we feel we can do.

DR. MELIUS: Yeah.

MR. ELLIOTT: We have the ability to do that. We can bound the environmental dose. So -- and there may be other types of radiation exposure that -- that we would encounter --

DR. MELIUS: Right.

MR. ELLIOTT: -- as we go through a dose reconstruction effort that we would feel we could do or we would identify we can't do, so...

DR. MELIUS: Yeah, yeah, right. Yeah.

DR. WADE: Okay. Discussion. Gen?

DR. ROESSLER: Two things. I agree in concept with that second page, certainly -- now I assume somebody goes over the grammatical stuff on this, so --

DR. WADE: That was usually Dr. Ziemer and he's

not with us, so --

DR. ROESSLER: Well, now maybe we could assign it to --

DR. ZIEMER: (Off microphone) (Unintelligible) grammar (unintelligible) as to content.

DR. WADE: Yes. Yes, you can.

DR. ROESSLER: The other thing I guess I'd look for somewhere, and maybe it's not necessary in this letter, is a nice concise statement that says exactly which workers qualify. It's -- it's broken up into so many different parts here that it's kind of hard for anybody to sort it out -- something like NIOSH does when they present the proposed class definition, and maybe that just comes somewhere else.

MR. GRIFFON: Well, one and two, right?

DR. MELIUS: One and two, those -- that is the proposed class definition, word for word.

DR. ROESSLER: Okay. I guess it is --

DR. MELIUS: I may -- I may have --

DR. ROESSLER: Maybe I got dis--

DR. MELIUS: -- lost a semi-colon or something in there but it's --

DR. ROESSLER: Maybe I got --

DR. MELIUS: -- pretty close.

DR. ROESSLER: -- distracted.
DR. WADE: That is the way NIOSH presented it.
DR. MELIUS: That is the revised one.
DR. ROESSLER: Okay.
DR. MELIUS: The one that was done (unintelligible) so that -- I think as a result of our discussions yesterday, I think we sort of clarified what was meant by that and -- and so those two points were I think taken directly from -- well...
MR. ELLIOTT: I think it's here, Dr. Roessler, and --
DR. ROESSLER: It is, I --
MR. ELLIOTT: -- the Board respectfully recommends the cohort be accorded to all employees of the DOE or DOE contractors or subcontractors who were monitored, or should have been monitored -- that's the phraseology we used in --
DR. ROESSLER: I see it now. I got distracted with the rest of the stuff.
DR. WADE: It's a new format for us. Other comments? Questions?
The Federal Official recognizes Dr. Ziemer only for the purpose of grammatical input.

DR. MELIUS: The Board grammatician.
DR. ZIEMER: Other than "the data were" that was corrected by the reader, although it's wrong in the document --
DR. MELIUS: And it has been corrected in the document.
DR. ZIEMER: -- the -- the introduction to the three bullets on the last page is very awkward. "These include... NIOSH demonstrated" -- it needs --
DR. ROESSLER: That's exactly it.
DR. ZIEMER: Yeah, so --
DR. ROESSLER: You'll -- you'll fix it.
DR. ZIEMER: -- but we can fix that, and -- and then I'm going to call this a grammatical question in -- well, I guess it's part of the definition so I can't call it into question -- "radionuclide exposures from Cyclotron" -- it seems to omit direct radiation, but...
DR. ZIEMER: Okay, so you can't call that into question.
DR. WADE: Other comments?
MR. GRIFFON: We maybe -- Jim, can you speak to that, just to clarify it for us?
DR. WADE: Could you raise the issue, Mark?

MR. GRIFFON: Yeah, can --
DR. NETON: I think it was intended that we -- we talk about internal exposures from the Cyclotrons in this definition. We believe we have badge results that we could use for Cyclotron activities --
DR. WADE: Okay.
DR. MELIUS: And so that would be covered under the -- what we've said we can do -- yeah, yeah, yeah, external exposures.
DR. WADE: Right. Other comments, questions? Anyone wants to speak in favor or against?
(No responses)
If not, then I guess we're ready to vote, and we'll do a voice vote.
All those in favor of the motion, as read, signify by saying "Aye"?
(Affirmative responses)
Opposed?
(No responses)
Any abstentions?
(No responses)
Okay. Then the motion passes. Again, remember that once the deliberations have taken place, Dr. Ziemer is fully empowered to do all of the

administrative work necessary to get this letter transmitted to the Secretary, so he's back in our good graces.

Welcome back to the table, gentlemen. As you come back, again, yesterday I mentioned many people deserve a great deal of thanks for this -- SC&A, NIOSH, the working group. But I would be remiss if I didn't point out again Mark Griffon and the tremendous effort that he put into this. It's, in my opinion, the -- the most dedicated effort I've seen by a Special Government Employee, and Mark is worthy of, I think, all of our thanks, and certainly mine, Mark.

DR. ZIEMER: Thank you. And Mark, certainly all the Board members agree with that. And I will confer with Dr. Melius, but if I may be allowed those -- some flexibility on the grammar, and perhaps the flexibility of inserting the dates on the two meetings that are --

DR. MELIUS: Yeah, I --

DR. ZIEMER: -- referenced. I'll take it without objection that those will be considered editorial changes.

DR. WADE: Well within your province.

(Whereupon, Dr. Wade and Dr. Ziemer discussed agenda item order.)

STATUS AND PLANNING FOR UPCOMING SEC PETITIONS: CHAPMAN VALVE; S-50; LANL; ORINS
MR. STUART HINNEFELD, NIOSH

DR. ZIEMER: I think maybe we'll just go ahead and pick up the -- the items that are dangling over from yesterday. The Status and Planning for Upcoming SEC Petitions, and Stu, I understand that you'll be presenting that. Is that correct?

We do have -- there are -- there are copies of the overheads in your packet, Board members.

DR. WADE: As Stu comes to the microphone, there are Board members who are conflicted at certain of these sites, but since this is only an informational briefing and not a substantive discussion of the technical issues, everyone can remain at the table.

(Pause)

DR. ZIEMER: Again, for clarity, Status and Planning for Upcoming SEC Petitions, this includes Chapman Valve, et cetera, on that list. It was scheduled for yesterday at 11:00 a.m.

Okay, Stu, proceed.

MR. HINNEFELD: All right. I am here to present the information prepared by LaVon Rutherford, so I'll try to -- I'll -- I'll go through the information provided and try to provide any answers to any questions anyone might have at the end.

I think I passed one up, didn't I? Well, I'll just briefly state that what we wanted to accomplish with this presentation, the purpose of the presentation, was to provide information to the Board about -- essentially about upcoming items that will be coming before the Board in the -- in the coming months, because this is work that's in front of us now and that all of the Special Exposure Cohort work of course comes to -- before the Board, and so this is sort of to allow you to prepare for information or the -- this upcoming work.

And we're going to cover here the number of qualified petitions that are currently under evaluations, as well as some of the additional information on sites that we're evaluating through the 83.14 process, which will likely get here as well. In other words -- you know, in that case we won't have a petition in house

yet, but we feel like we're -- we probably will end up with an 83.14 finding on some of these and that they will then develop into a petition.

Okay. This -- this slide presents a summary of the petition submissions that have been received so far -- SEC submissions -- the total number being 61. Twenty-two of those have already been qualified for evaluation, and 11 of them are still in the qualification process. That leaves 28 of the submissions that did not qualify, for one reason or another.

Of the 22 that have been qualified for evaluation, nine of those have resulted in at least recommendations of classes being added to the -- to the Special Exposure Cohort. They may not be all the way through the designation process, but at least resulted in that -- in recommendations to the Secretary to that extent.

Of course you all remember the NBS, which was qualified and recommended, but then determined not to be covered employment.

Of the 28 that didn't qualify, the most common causes for those are that petition requirements

were not met. There are a number of requirements for a petition that are published in 43 -- or Part 43 -- 42 CFR 83, the Special Exposure Cohort rule. You know, you have to have a valid petitioner, it has to be -- has to petition for a specific site. You know, that's one of the rules, that it -- you know, a single site petition. And -- and then there are technical bases that have to be established in order for the evaluation to proceed. Those are things like the -- the exposures for this event or at this site were not monitored, either they were just -- either no -- there is neither any personal monitoring data or workplace monitoring data. Another potential reason is that there is evidence that the monitoring data that is available is -- has been -- some of it has been discarded, it's been falsified or destroyed, you know, evidence like that. A third would be that someone with knowledge of dose reconstruction techniques to attest -- you know, explains why that the information available isn't sufficient. And then a fourth, there may be a technical paper presented, published in a number of forums, that might

call into question the data available -- that is available that would -- could be used for dose reconstruction.

Okay. There are ten petitions that have been qualified that are in various phases of the evaluation process. We issued evaluation reports for SECs number 28, 30 and 38, and those are on the -- on the chart here. The Y-12, action was just taken on, again -- or rather was earlier action adding a portion, and there's additional action just now; 30 was discussed but some -- briefly yesterday, the progress on 30, and additional work is going on there; and then 38 was a recommendation and action was taken on that earlier in the week. 33 and 43 are in the late stages of the evaluation process. We're in the final technical evaluation of the evaluation reports, and so those will be forthcoming relatively soon. Those represent Oak Ridge Institute for Nuclear Studies and Chapman Valve, which is an AWE in western Massachusetts.

DR. WADE: Stu, before you leave that chart, could you give us some expectation as to when the Board might see evaluation reports on 33

and 43?

MR. HINNEFELD: Let's see if Bomber has it in his notes here. I'm sorry, I've called him Bomber for too many years. I've got to remember to call him LaVon.

DR. WADE: Just for planning purposes.

(Pause)

MR. HINNEFELD: I don't have a presumed date, but my expectation from my understanding of where we are in the process is that those will be available before the next Board meeting, I would think.

DR. WADE: So it's reasonable for us to expect that the Board would have them in sufficient time before the next Board meeting in September that the Board would hear a presentation of an evaluation report at that meeting.

MR. HINNEFELD: I see some nods over there, so yes, I believe so.

DR. WADE: Thank you.

MR. HINNEFELD: So -- and then the remaining five that have been qualified are -- are listed on this -- on this slide. These are the remaining five of the ten qualified petitions. For the -- SEC 45, which relates to Blockson

Chemical, which is an AWE in Illinois, our current projected schedule is the evaluation report should be completed in early August and available for the Board and the petitioners.

For SEC number 46, Feed Materials Production Center, a DOE site near Cincinnati, the project schedule is for the Board and the petitioners to have the evaluation report around mid-September.

For SEC 49, Monsanto Chemical Works, which is the predecessor to the Mound site in Dayton, we don't have a finalized estimated completion date because we just recently had an additional data capture to help in that evaluation, so we don't have a scheduled date at this time for those.

Petitions number 60 and 61 that relate to the Oak Ridge Thermal Diffusion Plant, which was a predecessor for the gaseous diffusion plant, and -- and 61, which is a Los Alamos National Laboratory for employees exposed to radioactive lanthanum, these are 83.14 findings and 83 -- these are (unintelligible) the 83.14 process, in which case we've identified it's not feasible to do the reconstruction of some

component of the dose for these -- for these classes. And so these would -- should proceed fairly rapidly because we've already done a lot of the evaluation work before we arrived at this decision, so these should pursue -- proceed pretty -- pretty rapidly. I don't see right now whether we've actually identified the claimant to carry the cohorts forward. What we norm-- what we do on 83.14 is we identify a -- sort of a lead claimant, identify them that we cannot perform their dose reconstruction with sufficient accuracy with the information available, send them a blank petition -- I believe it's Form A of the petition -- and say just sign the form and send it back, and that's all the petitioning that that person has to do because the evaluation has already been done. So those should proceed fairly rapidly upon identification and contact with those lead petitioners.

MR. ELLIOTT: (Off microphone) (Unintelligible)

MR. HINNEFELD: We have identified them, according to Larry.

Now additional facilities that are being evaluated through the 83.14 process -- these

are things where we're -- we're pretty far down the path. We're pretty sure we have not -- we will not be able to find the information to allow us to com-- reconstruct all components of the doses at these facilities, and so we're proceeding to attempt to identify claim-- you know, lead claimants or le-- to form -- to become the petitioner for these sites. One site is Harshaw Chemical Company, which was an AWE in the Cleveland area. As you can see, the time period is from '42 to '49. It was one of the early, during the War, uranium producers. And also the General Atomics plant, with -- the covered period is the decade of the '60s. General Atomics is an -- an AWE, I believe -- I won't swear to that, but it's located in -- this is the one in LaJolla. Right? So... That's the completion of the prepared slides. I'll be glad to answer any questions I can.

DR. ZIEMER: Okay. Thank you, Stu. Let's open the floor for questions then at this point. Yes, John Poston.

DR. POSTON: Stuart, as you know, I'm new at this so I'm trying to add all these numbers up and make some sense out of it. On the

qualified petitions you said there were 11 on the early slide and then you presented ten, and then there's two that are being evaluated under the 83.14 process. So can you help me a little bit there? What's missing or --

MR. HINNEFELD: I'll try. The 11 qualified I believe included the NBS. Is that right?

MR. ELLIOTT: (Off microphone) (Unintelligible)

MR. HINNEFELD: It included the National Bureau of Standards, which was qualified and approved, but then determined to be non-covered -- a non-covered facility. So that's the difference between ten and -- ten and the 11.

DR. POSTON: Thank you.

MR. HINNEFELD: And then the two additional are not part of the ten or the 11. They are yet to be added to that list.

DR. POSTON: All right. Thank you.

DR. ZIEMER: Other comments? Yes, Dr. Melius. Oh, you have a comment on that, Larry Elliott?

MR. ELLIOTT: Just a little further elaboration. Those -- those two, the Harshaw and the General Atomics, at the time this presentation was made and prepared for this -- this meeting, we had not yet identified the --

what we call the --

MR. HINNEFELD: We call it the litmus test.

MR. ELLIOTT: We call it the litmus case, but it's essentially the -- an individual within that class for which we can't reconstruct dose who is a living Energy employee who has a presumptive cancer. That's very important that we -- we identify somebody with those characteristics to establish themselves as a petitioner. We talk to them about their role in that regard. And Harshaw Chemical, we -- Monday I signed the letter to this individual who's going to serve as the -- as the petitioner.

In our conversations with those people we express to them the duty that they have as a petitioner, that they have full responsibility and obligation -- if they wish to exercise it -- to notify others that they know of who might exist who worked with them in that class, that they can inform them of the process.

We advise them that the Department of Labor will be sending them a letter that says their -- their claim has been denied, but not to be concerned or worried about that letter, that we

are ready and willing to work with them and process the 83.14 petition with them and seek resolution of their case through this whole process. And so it's a -- it's a complex process and we're trying to explain it very clearly to these people. And I just wanted the Board to realize that.

We also have to advise them on -- it's their prerogative if they wish to have their identity revealed to people other than ourselves. We don't disclose that, and so we protect their identity and if they so choose, they can reveal that they are a petitioner and announce that they're willing to talk to others and -- and bring others into the fold. So it's -- it's a difficult and complex process and we're trying very hard to work very diligently with these folks.

DR. ZIEMER: Thank you. Dr. Melius.

DR. MELIUS: Yeah, Larry, don't -- don't get too comfortable, because my first question was related to that. I think I mentioned it last time, also, and I think we've struggled with the -- some situations where we don't have good representation, so to speak, and it's more

getting to the -- the -- many of the other affected or potentially affected parties involved in this process. And I would hope that we could work out the -- I understand there may be privacy concerns that the -- sort of the -- the index case is -- has certain rights and so forth, but -- but I think we need to sort of rework something so that we at least have a group of other people that are -- are infor-- should the index case not wish to reveal their identity, which I can understand, that we have a -- a public involvement process where we could certainly notify other people and have them involved in working group meetings and other sort of public events that we're having so -- 'cause I think it actually moves the process along --

MR. ELLIOTT: Yes.

DR. MELIUS: -- and gives it more credibility and -- and I would hope we'd work to -- to --

MR. ELLIOTT: We would welcome suggestions. We -- our deliberations on that point have been how can we get the word out, how can we announce that there is a petition and that people who -- and pro-- provide a proposed

definition for that class and let people know what that definition is. Whether they feel they fit into it, they can self-identify. They can step forward then and become part of the process. So we're looking at ways to do that -- media announcements, outreach, working with the Department of Labor in the resource centers. So we're going to start working harder at making these notifications more public and trying to bring more people into the fold.

DR. MELIUS: Yeah, I mean -- and certainly there are unions or former unions in the area with some -- some representation, and certainly the ability to contact and notify some individuals in the area. There may be retiree groups also and --

MR. ELLIOTT: Sure, those are good suggestions.

DR. MELIUS: -- I think that would -- would just be helpful to move along 'cause it's just an awkward situation --

MR. ELLIOTT: Yes, it is.

DR. MELIUS: -- to do. I have a coup-- couple more. I have a question --

DR. ZIEMER: Go ahead.

DR. MELIUS: -- for you, Larry, so -- last night we heard from a person who had -- petition was in the process of being qualified at Los -- Los Alamos, and I'm just confused between the 83.14 listing here and that other petition in terms of -- of coverage. There's a little -- I'm not sure if this description here is -- you know, being -- is this complete? I mean your listing on the slide, or what, 'cause I thought I heard something else last night and I'm -- I'm just trying to understand the -- what's being -- what petition's being evaluated and so forth, and then secondly is there a possibility of sort of merging the two processes.

MR. ELLIOTT: Absolutely, yes. We're going to be talking to Mrs. Ruiz about that. I think -- I talked with her last night and my understanding when she made her presen-- when she provided her public comment, she included years beyond what we're talking about in this -- this 83.14 situation. This 83.14 for LANL is Bio Canyon* and the lanthium (sic) exposures that occurred in the proce-- in the particular operations they did in that -- that area, so

there is a little bit of overlap, but I think hers is more broad in -- in duration time and -- and more areas on the site.

DR. MELIUS: Oh, okay.

MR. ELLIOTT: We'll be talking to her about that. Unfortunately, what happened in her case, she submitted the wrong form. And before we could actually start having conversations and working with the -- the petitioner about what has been submitted with a form, we have to get the right form in. And so we sent back to her the right form and we asked her to fill out the right form. Yes, that meant she'd checked the wrong box, but once we have that right form, we -- we are currently evaluating what she submitted, and we'll have a conversation. There is a teleconference that is conducted with the petitioner to go over the materials and the documentation that are submitted with the petition. They are advised of our evaluation at that point of the submittal -- submitted information. They are notified at that point as to what areas they -- the petition submission might be deficient in. There is full documentation of that

conversation.
They are provided a letter that -- that provides all of that documentation. They're asked to review that and make sure that if they heard something that's different than what was recorded, they -- they let us know. There -- there's a -- a time frame that's established for them to contribute and remedy any -- any deficiencies. It's not a hard and fast thing. We continue to advance that time frame -- frame, if they ask for it.
And unfortunately, Mrs. Ruiz just hasn't got into that -- that dialogue with us yet, so I'm anxious that -- we'll have Laurie Ishak talk with her. We'll probably end up aiding her in -- in the development of that petition and coordinating this one with the 83.14 that we have.
DR. MELIUS: Okay. I mean, without getting into the details of what happened or whatever -- I mean I would hope that, you know, somehow a telephone call early on could take care of this --
MR. ELLIOTT: I agree. I agree.
DR. MELIUS: -- and --

MR. ELLIOTT: That would have been the best way to handle it, personal communication rather than a letter saying you checked the wrong box.

DR. MELIUS: Yeah.

MR. ELLIOTT: And that's -- that's why I feel it's very important that we have somebody like Laurie Ishak to serve as a -- as essentially an ombudsman here to --

DR. MELIUS: Yeah.

MR. ELLIOTT: -- to identify these kind of situations and say this is not the right way to do this. We can do it a lot better way, so...

DR. MELIUS: Even the IRS you can call somebody. They put you on hold forever, but...

MR. ELLIOTT: Absolutely.

DR. MELIUS: I have one other comment --

DR. ZIEMER: Okay.

DR. MELIUS: -- though not necessarily for Larry, so you can sit down. But it's -- it's a follow-up to our -- I guess the Y-12 we dealt with, but I notice on some of these other pending SEC petitions, some of these are very large sites, and I think the -- Y-12 was the first one where we've done -- sort of picked out part of a site in a not-straightforward way

in terms of being able to identify workers and, you know, who was -- who's actually in the cohort and how -- how it will be implemented, just much more complicated. And I suspect as we look at some of these other sites, you know, with potential SECs, like Rocky Flats, LANL, Fernald and so forth, that -- that we may -- we're going to encounter those situations again and -- and it would be helpful for the Board I believe to have some feedback on how that definition is being implemented. How -- how well did it go, is there -- you know, some feedback through -- you know, as you work with DOL on -- on implementing the Y-12, just so we have some lessons learned so that we -- we do, you know, as good a job as we can in defining that Special Exposure Cohort. So I think as you do that over the next few months with -- with DOL, it would be helpful for us to here about that.

DR. ZIEMER: Thank you. Brad.

MR. CLAWSON: I just had a question for Larry. You know, you're telling about when you finally identified an individual that meets the qualifications that you wanted, I -- you did

call out a lot of forms and stuff like that, but is there a personal phone call to explain to these people, because a lot of these people are getting up in age and, you know, you mentioned the comment that you're going to be getting a letter from DOL saying you're not qualified but don't worry about that. I just want to make sure there's a personal phone call or --

MR. ELLIOTT: Yes.

MR. CLAWSON: -- someone to help --

MR. ELLIOTT: Yeah, yeah.

MR. CLAWSON: -- guide it through.

MR. ELLIOTT: On 83.14s there is a personal phone call. On the -- on the petitions that come to us unannounced, and we don't know -- you know, we just receive one in the mail, we've been very passive about that. We're going to now be more active and make personal phone calls, make sure that we talk to the folks over the line before they get a letter back from -- under my signature saying we got your -- we got your submission and it doesn't meet the mark, so we will be taking action on that. But for 83.14s, yes, we make a personal

phone call -- 'cause we think it's important to tell them you're going to be getting a letter that says we cannot reconstruct your dose, and you'll get a subsequent letter from the Department of Labor that says your claim has been denied because of that. And that's a very chilling letter when they get that. And we want to prepare them for that and we want them to understand that when they receive that, that's not the end of the day, that we are -- you know, we are -- at that point, we start working with them. We tell them we're going to send you the right form. We even fill out the form. We put on it a sticker that says "sign here," so there's no mistake about checking the wrong box or using the wrong form. We really have -- saw the need to work hand in hand with these people.

MR. CLAWSON: I appreciate that. Thank you.

DR. ZIEMER: Thank you.

DR. MELIUS: Larry --

DR. ZIEMER: Dr. Melius.

DR. MELIUS: -- sorry, but you said -- you've mentioned this twice and I -- why do they have to get a letter saying they're denied?

MR. ELLIOTT: Well, you have --
DR. MELIUS: If you -- if you can't do the -- I'm just curious.
MR. ELLIOTT: It's --
DR. ZIEMER: I don't know, it sounds like Labor's way of closing something out.
MR. ELLIOTT: It's part of the -- Labor's procedures. They have -- they have a formal process that they've got to go through, and they have to notify the person that their claim has been denied, as filed under Subtitle B for dose reconstruction.
DR. ZIEMER: It would seem to be helpful if there was a different kind of letter that said however, in your case -- and then --
MR. ELLIOTT: Well, we're working with them --
DR. MELIUS: Yeah, okay.
MR. ELLIOTT: -- on the language of this letter 'cause we don't -- we --
DR. ZIEMER: This -- this is sort of what I was referring to yesterday, when get into the bureau-ese --
DR. MELIUS: Yeah, yeah.
DR. ZIEMER: -- it is somewhat intimidating for a person and they don't really know how to

understand it, yeah. So if you can work with Labor, that would help.

MR. ELLIOTT: We are aware of this language and we're working --

DR. ZIEMER: Robert Presley.

MR. PRESLEY: I just saw one the other day that came from Labor, and --

MR. ELLIOTT: Can I sit down?

MR. PRESLEY: Yeah, you can sit down. This -- I'm going to be honest with you. I've had some very, very good comments from NIOSH on their participation and everything. But I saw one last week from Labor that said -- the guy brought it to me and said this -- what do I do? And it said you have been accepted, but here's five pages of stuff that you've got to fill out on your association with the claimant. I mean they've already turned in birth certificates, and they've already turned in this, and it said you have to check the box -- but there's no box to check -- and then it says you've got to write a letter. Well, all this stuff's been done. And I -- I -- I hate to say it, but -- and the person that brought this to me is a very, very knowledgeable person --

MR. ELLIOTT: (Off microphone) (Unintelligible)
MR. PRESLEY: Yeah, and it's just --
MR. ELLIOTT: (Off microphone) Please say that.
MR. PRESLEY: It's Subtitle E. And it -- it is, it's -- it's very, very hard for people to understand. I am going to get a copy of this and send it to -- to Turcic and see if he can't do something about it, so it's -- we do have a very, very big problem.
DR. ZIEMER: And I think Pete committed to us yesterday that they were trying to address this issue, so hopefully they will become better at it, as it were.
Other comments? Yes, Roy DeHart.
DR. DEHART: I suspect the denial letter is required before one can go and request an appeal and (unintelligible).
DR. ZIEMER: But perhaps it can be somewhat modified to correlate better with what NIOSH is going to do as a follow-up.
Other comments? I note that -- Stu, that when you gave us the statistics on the -- the submissions that didn't qualify for evaluation -- yesterday we heard from Representative Udall -- actually asked the question about whether

the Board sort of monitors those, and maybe I will re-raise that question. Does -- does the Board wish to look at some of those cases, just to satisfy itself in a kind of audit fashion, or is that -- is that a concern to the Board? I'll just ask it that way. And if it is, at least at some level, it would seem to me fairly straightforward -- something a working group could take a sample of those -- I'm not even sure we'd need contractor help on those. It'd seem to me it would -- whether or not something qualified would be fairly straightforward, but let me get some feedback on that question. Dr. Melius.

DR. MELIUS: Yeah, I actually think it would be helpful to review some of those. Not that there are necessarily a lot of problems or, you know, that we've necessarily heard about a -- a lot of problems with them and -- and so forth, and I -- I know from some of the reports Larry's given that there are, you know, some very valid reasons why some of these have been turned down. But -- and sort of -- it -- it is an area that -- where people are being denied a review and I think they -- they're looking for

some way of -- of having that evaluated. I -- I think we could do that, not in the sense of -- 'cause there is an appeals process and so forth, not to interfere that, but to get a better understanding of how to communicate this, and as well as to be able to say that, you know, we've reviewed this part of the program and it appears to be operating well -- appears to be operating well, needs better communication or what-- you know, whatever that -- in sort of a preventive sense. And then -- then when these issues come up we can say that well, look -- no, we have looked at this overall part of the program and it appears to be operating as such.

DR. ZIEMER: Well, we'll let others weigh in. I think -- Larry, you have a comment on that?

MR. ELLIOTT: Well, I don't want to steal thunder from somebody, but I would welcome that. We -- we have what we think is a very clear documentation of the interaction that leads to denying a qualification of a petition. We can lay that out if you want to send a working group to Cincinnati. I think you can spend a half a day and look at all 28, and

you'll have a clear sense of what has ensued to result in a denial for qualification, and we would appreciate any comments or recommendations for improvement.

DR. ZIEMER: And thank you. Mike.

MR. GIBSON: I agree that that -- that is I think something we should look into. You know, we audit the dose reconstruction cases and everything else and it's -- it's in our purview and I think -- I think it would be very helpful.

DR. ZIEMER: Thank you. Other -- Wanda?

MS. MUNN: It seems that a small working group would be the ideal and effective way to deal with that issue. That group could bring a complete report back to the Board in a matter of a few minutes.

DR. ZIEMER: Thank you. Other comments?

(No responses)

There seems to be some level of consensus that that may be something we should do, and when we get to the item on working groups perhaps the Chair will simply appoint a working group to pursue that, if that's -- without objection, we can do that. And it appears that it's

something that we can handle directly without additional assistance. And if the working group gets into that and finds that there's some weighty issues that need to be address, we can get additional help.

Okay. Thank you. Anything further for Stu or for Larry on this?

DR. WADE: Maybe one summary comment. So if I -- if I sort of integrate all that you've told us, Stu, it's possible that this Board would see in September petitions from ORINS, Chapman Valve, Blockson Chemical and possibly Oak Ridge Thermal Diffusion.

MR. HINNEFELD: I believe those are the ones --

DR. WADE: And I say that just so the Board and its working groups can also begin to think about how it might want to engage SC&A, if appropriate, as that meeting date comes up.

MR. HINNEFELD: Right. I was thinking Fernald might be in there, but I don't believe it will. I mean it's -- the scheduled completion date is so close to the next Board meeting, I think (unintelligible) --

MR. ELLIOTT: Yeah, Fernald may be tough, but I would -- I would think, and I hope, that we

would prov-- be able to provide Harshaw, the 83.14 situation there, and the LANL Bio Canyon*.

DR. NETON: (Off microphone) (Unintelligible) merges with the other one.

MR. ELLIOTT: It may -- that may be the complicating (unintelligible) --

MR. HINNEFELD: That's right, I forgot about that.

DR. WADE: Okay. Just to get a sense of the work in front of us. Thank you very much.

SITE PROFILE UPDATES:
SAVANNAH RIVER SITE; HANFORD; NEVADA TEST SITE;
SECOND YEAR SITE PROFILES
DR. JAMES NETON, NIOSH

DR. ZIEMER: Thank you. Let's move on then to the item that starts today's agenda and that is the site profile updates. Dr. Neton is going to cover that, and I believe there is a handout on this, as well.

DR. WADE: And I will again note that we have Board members conflicted on certain of these sites -- Wanda on Hanford, Mark on NTS -- but since this is a discussion of site profiles, they can certainly remain at the table. They should not make motions or vote on motions, but I don't think those will be forthcoming on this

topic.

DR. NETON: Good morning, everyone. I have a fairly brief presentation -- I think it's brief, anyways -- on the status of where with the site -- site profile reviews. There's so much effort has been focused by the Board and working groups on site profiles that were related to SEC petitions -- namely the Y-12 and now Rocky Flats ongoing -- that sometimes the other site profile reviews that have been conducted by SC&A have -- have frankly taken a back burner because of, you know, resource constraints to help move them forward. So I thought, you know, we would take some time here just to put on the table what's out there, what needs to be reviewed and -- and a brief snapshot of the status of where we currently are with these -- these site profiles.

I'm going to talk first about the three that we actually have in our hands -- for some time now -- reviews by SC&A for Savannah River, Hanford and NTS. And then I'll finish up with a brief review of where we are with the six additional site profiles that have been -- SC&A has been tasked with doing and -- and where we are in

that regard.

The first one I'll talk about is Savannah River Site site profile review, and I think it's probably the one we're furthest along, although we still have a long way to go. For each of these the Board has -- has selected a working group, and I've listed the working group for each of these on the slides. Dr. DeHart is the chair of the Savannah River Site working group, along with Mark Griffon, Mike Gibson and Dr. Lockey.

For each of these we've also appointed an OCAS point of contact. That is, a health physicist on our staff who will help facilitate these reviews. I -- I am involved with all of them, but I obviously can't -- can't get engaged at the level I have been on some of these, such as Y-12. So for the Savannah River site profile we have Sam Glover as our OCAS point of contacts -- point of contact.

If you recall, the site profile reviews are fairly large documents. I mean they -- then tend to run around a couple of hundred pages, and many findings and observations are sprinkled throughout these reviews. And a

while back the Board asked SC&A to sort of consolidate these findings into a sort of a hierarchy as to which ones are really important issues and which ones are -- are, you know, significant but not necessarily need to be addressed right away. And SC&A has produced these finding resolution matrices for the Savannah River, the Hanford and the NTS site profiles. So we've had that in hand for -- for Savannah River for some time.

And the OCAS response to that matrix had just been provided on June 5th, so we've finally gotten a consolidated response together. SC&A has that in their possession. And in fact there was a working group conference call just before the Board meeting, on June 7th -- again chaired by Dr. DeHart -- where there was a meeting of the minds, so to speak, to go over issues. It was sort of a high level meeting, not in the sense that there was any substantive scientific discussions or resolutions being -- being taken care of, but more in the spirit of, you know, where are we, what's on the table, what are the next steps forward. And I encourage Dr. DeHart to correct me if I'm wrong

on this, I didn't have the opportunity to participate in the call, but that's my sense of what occurred.

So the next step -- and these are all going to parallel very similarly to what's been going on with Y-12 and Rocky, and that is the working group is going to have to convene. I suspect that there will be a face-to-face meeting next for the Savannah River Site to sit around a table, very much like we've done with the other site profiles, and hash out the issues. You know, where -- where are we, where are the areas of agreement that these things can fall off the table, and where are there issues that we still need to have some -- some scientific debate -- discussion, I should say.

Okay. The next one is the Hanford site profile. I've listed the working group members here. Dr. Melius is the chair. Chuck Nelson is our OCAS point of contact. And again, SC&A has created the finding resolution matrix. At the current time OCAS, with the assistance of ORAU, is preparing responses to that matrix. I think we're close, but we're not quite there yet. As soon as that's completed, we will

forward that over to SC&A and then we'll have to see about availability of time and staff resources to schedule a meeting to move that one forward.

Nevada Test Site working group is chaired by Bob Presley, with the other three members listed here. Mark Rolfes is our point of contact. Again, just like Hanford, the finding resolution matrix is in our possession and we are preparing responses to that matrix. There are some issues, though, necessarily related to the addition of the Special Exposure Cohort to the -- NTS to the Special Exposure Cohort in the sense that once that becomes -- once that class is added, we believe a number of the issues that were raised in the site profile evaluation will drop off the table, we'll no longer be constructing doses. So you know, we expect that letter to be put out by the Secretary fairly soon. Once that happens, we need to look at the finding resolution matrix to see, you know, which issues remain. I'm certain there are issues left, but we don't want to be going over issues that are no longer relevant. And there is no meeting currently

scheduled for NTS.
And the last slide I have is a listing of six additional site profile reviews that the Board asked SC&A to conduct, those being Fernald, Linde, X-10, Mound, LANL and Pinellas. I've listed the OCAS point of contact for each of these, and for most of them -- for Fernald, responses to SC&A ques-- SC&A --
The way this normally works is SC&A goes about and does an investigation, interviews people at the sites, looks over some preliminary documents, then puts together a list of questions that they have that they feel that, you know, we could discuss prior to them issuing a report where we may be able to clarify some issues, add some substance, that sort of thing. I think for all of these that are listed here, we have received a list of questions from SC&A, with the exception of X-10 and Pinellas. So right now we have not been engaged with SC&A in any way on those sites. We expect as they -- as they move further along in those reviews, we'll be receiving questions. And for two of these sites, I think that's Mound and Los Alamos, we've actually had

conference calls with SC&A. These -- these are conference calls -- the questions come through and we prepare responses, and then there's a conference call held where we sort of just go through these issues point by point and offer any insight that we might have into the -- either the correctness or the validity or the -- you know, the -- how -- how close they are to the mark on some of these areas that they're -- they're going down.

And that's all I really have to say. I'll be happy to answer any questions if there are any.

DR. ZIEMER: Okay. Thank you, Jim. That's a very good update for us, to see where we stand in terms of the timetables.

I've got Roy DeHart and then Jim Melius. Roy?

DR. DEHART: If I may, I'd like to take just a moment to go through a little bit of what the working group has done.

DR. ZIEMER: Proceed.

DR. DEHART: And to do that, I need to go back in history a bit. And I'm going to jump in the middle of the NIOSH work that has been done with regard to the report.

In March of this year -- of '05, I'm sorry,

March of '05, SC&A published the review of the NIOSH Revision 2. This was followed then by a briefing to this Board in October of last year. Then in January of this year SC&A published its matrix of issues, and that, too, had been briefed to the Board. The -- about that time, the working group was formed, so we're -- we're a new working group. SC&A's resolution matrix then was published in -- the 17th of January, '06 and, as I've said, presented to the Board. This was followed then by the decision to have a meeting of the working group, and that was scheduled this spring, to occur in June. On June the 7th, the working group set up a conference call to -- as a basic history of what has transpired with this particular document, and it was not a resolution meeting. It was a two-hour meeting that was recorded but not transcribed because it was simply -- simply a review. All members of the working group were present and representation by NIOSH and SC&A were -- were there.

Before the meeting occurred on the 7th, NIOSH provided a copy of their response to the January matrix, and that was on the 5th of

June. Obviously there was no time for SC&A to do any -- any review of that at all. In fact, there had not been time for SC&A to do a review of Revision 3, which was published back in the spring of this past year. It's a year old now, so that Revision 3 has not been reviewed by SC&A.

The members of the working group, with permission from NIOSH, have tasked SC&A to do two things: Review Revision 3, and at the same time look at NIOSH's response to the matrix of 16 issues that they have defined. That will occur in July. There will be a one-day face-to-face meeting of all active participants in Cincinnati, the date to be determined, during August, with the intent of a report out on that particular resolution meeting at the September meeting. So that's where we stand.

DR. ZIEMER: Very good. Thank you, Roy, for that additional update. Dr. Melius.

DR. MELIUS: I have a quick question on Hanford. You have a better idea of when your draft response is going to be done? You said soon. I mean --

DR. NETON: I think it's soon. We -- we

actually have received responses from ORAU and we're reviewing them internally at NIOSH, so I'm reluctant to always give an exact time.

DR. MELIUS: I know, I'm just trying to --

DR. NETON: I don't mean to be --

DR. MELIUS: -- pin you down a little bit more than --

DR. NETON: Yeah, weeks. Weeks.

DR. MELIUS: Okay. Then -- then what I will do is con-- contact either you or Chuck, whoever's --

DR. NETON: Chuck.

DR. MELIUS: -- appropriate, and start to talk about setting up a meeting.

DR. NETON: My recollection was that those -- the responses were just about ready. There were just a couple issues that we wanted to make sure we refined them a little bit.

DR. MELIUS: And I would also suggest that we -- I think the model that Roy -- Roy's group used I think is a good one to -- maybe first a conference call, short conference call to try to pinpoint, you know, key issues and -- and then not get bogged down in other issues I think would be helpful, and then decide at that

call what -- what's an appropriate time to have a full meeting -- do that, so...

DR. WADE: Could I just ask --

DR. MELIUS: We'll follow your lead, Roy.

DR. ZIEMER: A question here. Lew?

DR. WADE: A clarifying question because it has budget implications. In the case of Hanford and NTS, what -- what version was reviewed by SC&A and what version is current?

DR. NETON: I'm not prepared to answer that right now. We need to look at that, yes.

DR. WADE: We all need to look at that because there are -- there are contract implications when --

DR. NETON: Yes.

DR. WADE: -- we go back and ask SC&A to look at another document.

DR. NETON: Yes.

DR. WADE: Okay.

DR. ZIEMER: John Mauro --

DR. NETON: Although -- before John speaks, I might -- I think, though, a valid response on NIOSH's part is "That issue has been addressed, and here are the relevant pages of the new revision --

DR. WADE: That's fine.

DR. NETON: -- that -- that take care of that issue."

DR. MAURO: I have two I guess questions and I guess suggestions. Regarding when there is a new revision, such as Savannah River where I believe it's a complete new revision, I'm not quite sure, we see that as not within our scope of work under Task I. However, and this is where a judgment call's in -- there are -- may be some circumstances, though, where a document has been revised, but only to -- marginally. And I think that -- one of the first steps during the conference call, such as the one we had with Dr. DeHart. In that case the judgment was made this was a substantial revision and it was -- and as a result we don't take action until authorized to proceed on -- on such a new endeavor. So I guess -- there's a little gray area, when it's appropriate for us just to move forward on -- on -- in the process and when we really need to get authorization because it represents an ex-- extension of scope of work.

DR. ZIEMER: Right, and the working group at that point has expressed what they would like,

and I think it's got to come up through our Federal Official, and there's also some implications with the contracting officer if there's a substantial change. Again, a bit of a judgment call, but a minor revision on, you know, a few paragraphs is one thing. A complete overhaul is a --

DR. MAURO: Exactly.

DR. ZIEMER: -- a substantial different task.

DR. MAURO: Exactly.

DR. ZIEMER: Substantially different task.

DR. MAURO: The other question has to do with the normal process from -- for preparing our reports, the draft reports that come out. As you know, we are working on I guess seven or eight of them right now, all of which are substantially written, except we haven't had an opportunity yet to have our dialogue with the questions and answers, which is always very helpful, with NIOSH before we put the reports together.

What I've done, because I am concerned -- September 30th is the end of our period of performance and we have a commitment to deliver those draft reports to you prior to that date.

I guess I'm looking for a little guidance. We can do one of two things. We could proceed to prepare our draft site profile reviews and deliver them if -- during that -- and move along those lines. Along that way, if we do have our question and answer dialogue, great, we will accommodate that, work it into our reports. But if it turns out the timing is such that it becomes difficult to -- to do that, we could do one of two things. We could hold off on delivering our draft report until we do have the questions and answers, or we could go ahead and submit the report without the benefit of the question and answer session that we normally would have, and deal with the question and answer session during the closeout process. It really becomes a matter of what -- what's your preference.

Right now, my preference is let's move the reports out. I like the idea of getting the material out into the hands -- but the downside of that is what you would have is a report that would not benefit from the dialogue that we normally would have before the report goes out. So a little guidance -- right now we're -- we

are moving forward writing these reports, even though we usually by this time would have had the dialogue with -- with NIOSH.

DR. ZIEMER: Let me react in part to that, and others can join in. Certainly there's a contractual deliverable that you're concerned about.

DR. MAURO: Exactly.

DR. ZIEMER: Which is some sort of written document that is provided to the contracting officer, I believe, as well as to the Board. But as you've indicated, that has not had the benefit of what we early on called some sort of reality check --

DR. MAURO: Exactly.

DR. ZIEMER: -- you know, is it (unintelligible) --

DR. MAURO: (Unintelligible) --

DR. ZIEMER: -- factual -- are the (unintelligible).

DR. MAURO: -- exactly.

DR. ZIEMER: So if -- if -- is -- my question is, is there some way to distinguish, in terms of how we identify that -- I mean we've been talking about first draft or something draft,

but is there -- is there some way to identify that --

DR. MAURO: Sure.

DR. ZIEMER: -- for what -- maybe you can think of a clever name that's -- I don't want to call it a pre-reality draft, but --

DR. MAURO: We call it preliminary. In other words, we could call it preliminary and make it very clear in the introduction that this report is being delivered without, you know, having gone through the question and answer session. As soon as that question and answer session is held, we could submit a revision.

DR. ZIEMER: But let me ask Lew, in terms of contractual requirements on deliverables, if -- if they have a -- for example, a fiscal year deadline on a deliverable and they're ready to -- and they have the written report but haven't been able to do that cross-check with -- with OCAS, what -- or NIOSH, what -- what is the -- what do we need to do on that?

DR. WADE: And again, I speak in this case not as the Designated Federal Official but as the technical project officer on the contract, so -- I mean I think -- I think we could go one of

two ways, and -- and they've been pretty well articulated by John. I think contractually we could work it out with SC&A that they did not have to meet that deliverable. We could issue them instruction and we could absolve them by our communication. But in this -- this era of audits and reviews and -- I can appreciate their reluctance to be in that situation where they, while they haven't met a deliverable, they've got a letter that explains it, but -- so I think that the approach that you've just outlined is probably preferable. And that would be a submission, albeit a submission that clearly identifies what the submission is and what it's not. But we could work it out either way. Either way, it could be worked out contractually.

DR. MAURO: At present we are moving forward on that path. If we're -- I guess until we're given other direction. You know, if we -- the -- I guess the step that would be taken is we could submit a letter -- submit the report and -- with the appropriate qualifications of what this report is, and -- or alternatively, we could make a request of the contracting officer

for a no-cost extension for a deliverable. Normally we're -- it wouldn't cost any more money, but rather than have everything delivered by September 30th, we would -- may want to push it off to a later date. So that's -- really becomes the option.

DR. WADE: In fact we could even initiate that by sending you a letter making that suggestion. So I think there are ways to deal with it. But again, this is a -- this is a climate where everyone watches and counts everything.

DR. ZIEMER: Roy.

DR. DEHART: I think, too, we have to keep in mind what Savannah River has taught us, that these are living documents. I hate to use that term, but -- but they're dynamic. And before one review is completed, the second revision is out. And that sort of thing I'm sure will happen with most of these reviews that are coming out on site profiles. We just need to be aware of that, that it's an ongoing process.

DR. MAURO: In fact, in dealing with that issue -- for example, right now we are reviewing a number of documents. What we tried -- we try our best to be current. That is, though we may

have begun the process with a given document, if -- there are always OTIBs that are being issued, that -- that's one -- the situation. When they are issued, we bring them in. So we -- in our first issuance of our draft report we try to have that deliverable current. All right. So -- so -- for example -- but if we're real close to completion and we're ready to deliver and a new version comes out or a new OTIB comes out -- and this is where I make a judgment call and say listen, you know, we -- I don't want to stop the presses and now regroup, so -- it's almost like it's -- it's a gray area. You know, when do we try to incorporate late-breaking information. If we can, we do. If we feel as if it's overwhelming, in terms of cost and in terms of schedule, then we don't. We deliver our deliverable and then -- we acknowledge, however, that by the way, this deliverable does not reflect the latest OTIB that came out last week, you know, or something like that.

DR. ZIEMER: Thank you, John. I don't know who was next. Wanda?

MS. MUNN: I have great sympathy with John's

position, and I understand the need for the contractor to try to appear to be Caesar's wife. But the first visual image that I have is of an enormous churn. Certainly we must have learned, as Dr. DeHart has pointed out, that issuance of documents prior to a cross-talk occurring between NIOSH and the contractor is absolutely disastrous.

What we get, first of all, is delivery to the Congressional representation the day after the document is issued, and a long list of concerns from the Hill about what our perceived-to-be-auditor is finding in the documents that have not yet been discussed. There must be some way for common sense to override our contractual requirements here so that documents are not placed on the street before they've had an opportunity to be at least initially vetted between the technical authorities that are looking at these things.

I know you don't want to get in a position where you have only a piece of paper that says this document exists but it's not out yet. That's not a good thing, either. And I understand also what Dr. Wade is saying. But

surely we must find some way to be able to not put SC&A's documents on the street before they've been vetted by the NIOSH technical staff. This just has been disastrous for us in the past, and will continue to be disastrous. There's no point in our churning everybody if we don't absolutely have to do that. And if contractual obligations are what is causing us to do that, then we need to take a closer look at what the contracts -- at the wording of the contracts and how we handle them.

DR. ZIEMER: And certainly Dr. Wade has laid out a method that would allow the venting (sic) to occur first and -- so there certainly is a mechanism to do that. Dr. Melius, an additional comment?

DR. MELIUS: Well, yeah, I would strongly disagree with Wanda's comments. First of all, the, you know, setting out of drafts has not been a disaster. There is a benefit to having some dialogue, but I think we all sort of remember that there's a constituency out there, a public, that wants this information and if the rate-limiting step is within NIOSH and -- or within their contractor or whatever in

getting -- you know, responding to SC&A's draft, so be it. I mean we can't hold these programs up for-- forever, and I think the credibility of the entire program is not served by stretching out -- out the delivery of site profile reviews that -- delivery of other documents, and if -- I think there's been a reasonable time period involved. We're already falling behind in getting work done in this program. Site profile reviews, SEC reviews and so forth, and it's difficult and while I sympathize with NIOSH and NIOSH staff and all the other people involved in this program, I think that the resources need to be available to respond in a timely fashion to these documents. It's not like all of them are being delivered September 1 waiting for, you know, questions to -- to come back and so they can be delivered by September 30th. I think -- we're in June. It still -- we have until September, so if it's such a priority to get this -- and if there are things in those documents that are so disturbing to NIOSH, then let them make it a higher priority to get the information back to SC&A. But I think overall the program's much

better served by us com-- you know, doing our function, which is to get reports out. I think, as has been suggested, having a introduction or cover page that indicates the status of this, the fact that NIOSH has not responded to -- is sufficient. I'll remind the Board that we have a -- discussed this situation before and we have a policy of making these draft documents available, preferably after there's been some dialogue with NIOSH, but I think SC&A has done its job in getting the information to NIOSH, at least as I understand what's been done in terms of the schedule. It's up to NIOSH to get back in a timely fashion to this. And if not, I think we just need to get these site profile documents out and available and continue on with the process.

DR. ZIEMER: Thank you. I -- as I understand what you're saying, that if -- if it appears at least that there has been a reasonable amount of time elapsed, then perhaps should not delay -- and I would guess you might also say, for example, a -- a document from the contractor that appear-- or got to NIOSH on September 25th

or something --

DR. MELIUS: Exactly.

DR. ZIEMER: -- you wouldn't put it in that category.

DR. MELIUS: Yeah, yeah.

DR. NETON: I think that --

DR. ZIEMER: So you might have both -- both options available --

DR. MELIUS: Yeah.

DR. ZIEMER: -- depending on the situation, so -- Jim.

DR. NETON: I would like to offer just some clarification on what the current process is.

DR. ZIEMER: Sure.

DR. NETON: I think there's a little bit of confusion here maybe. We are not currently reviewing draft documents that SC&A produces. I mean they go out the door the day they're issued by them, and we get them the same time the Board does. Where the review cycle -- and it's not really a review cycle, it's -- it's a question cycle. In their prepar-- in the preparation of documents, SC&A comes up with certain questions, certain questions that they might want clarification for, and this assists

them -- at least in my mind -- in writing a better document, and NIOSH has the opportunity to respond to those questions, and that's where the bottleneck is.

DR. ZIEMER: Right.

DR. NETON: It's not in the release of the final product or the draft --

DR. ZIEMER: I think --

DR. NETON: -- document.

DR. ZIEMER: -- John is saying that they're -- they're ready to go --

DR. NETON: Right.

DR. ZIEMER: -- but they're just awaiting that feedback on some of the --

DR. WADE: Right, and talked about the -- let's -- I think this issue can be answered in the grain. I think we're talking about the six site profiles that are under review this year. Correct?

UNIDENTIFIED: (Off microphone) No.

DR. ZIEMER: No, these are ones that there -- there's been no SC&A report out yet. Right?

DR. MAURO: Yeah -- right. There -- there are nine that -- there are six that were from last year and nine that are in the pipeline, and the

-- the nine that are in the pipeline -- what we have is a -- an interesting situation. We've got nine in the pipeline -- I believe it's nine -- that we're going to be putting out right now, and we -- are being written. A lot of them are already written, sitting -- holding -- in a holding pattern waiting to -- for an opportunity to make sure we got our facts correct.

DR. NETON: Are you sure there are nine, John? I thought that these were the six that you were producing at this point. I can't think of any other sites.

DR. MAURO: I -- I -- no, I'm thinking nine, because I remember the nine was this -- that we had a set of nine. Like -- like Paducah is not up there.

DR. NETON: Paducah, yeah.

DR. MAURO: And there was -- I might be wrong, let's see --

DR. NETON: Okay, well --

DR. ZIEMER: Okay, but --

DR. MAURO: Maybe it's the -- the -- the exact number -- please forgive me, it might be seven then. But the -- the -- now we also have not

delivered our questions on every one of them, as --

DR. NETON: Right.

DR. MAURO: -- you just correctly pointed out, so we are also part of the bottleneck. I mean but --

DR. WADE: Let's just start with this six list and then -- I think three things emerge when I look at this list. In the case of two of them, LANL and -- for LANL, responses to questions have been provided, so you -- you've gone through this step for LANL. You've gone through this step for Mound. Right?

DR. NETON: Right.

DR. MAURO: Yes, that's -- that's correct -- that's a correct statement.

DR. WADE: Okay. So in that case, we've --

DR. ZIEMER: You're ready to go on those.

DR. MAURO: We're clean -- we're clean.

DR. WADE: On Fernald and Linde, NIOSH is drafting responses.

DR. NETON: Correct.

DR. WADE: So according to Dr. Melius's provision, this is June, that's September, one could hope that those two will have been

through this process by the time you release. And that leaves us the two where, on X-10 and Pinellas, there -- you have not issued the questions.

DR. MAURO: Correct.

DR. WADE: So we -- we need to talk about that, and maybe that falls into the questions coming out next week, NIOSH can respond. Or maybe the category of September 20th.

DR. MAURO: Yes.

DR. WADE: So to me, the answer is in the grain. Now if there's another one, we need to know what that is and what category it's in.

DR. ZIEMER: Paducah, maybe.

DR. MAURO: And that would be Paducah, and those questions are being drafted as we speak, and they will get them out as quickly as possible. But what -- what I'm saying is, this is -- you know, we're real close to July, September's around the corner, and production -- and we really normally are in production at this point.

DR. ZIEMER: I think certainly our official is aware of both sides of the concern and the time lines here, and there are ways to address it

either way to try to minimize --

DR. MAURO: It seems to be a manageable situation.

DR. ZIEMER: I think we want to minimize the concerns that Wanda has. We want to maintain the openness that Jim has referred to. It's a -- it's a fine balance, like much of what we do, and I think it's doable.

DR. WADE: And I would suggest that at the August call of the Board that we make a complete report of this and the Board can decide how it would like to proceed. Hopefully, if we do good staff work, we can get these issues resolved. But if not, then the Board can weigh in in August as to how it would like to see.

DR. ZIEMER: Very good. Thank you. Other comments on this -- Jim?

DR. MELIUS: Just -- it's not a question but a comment. I notice on this list of six coincides with at least two of the SECs that are being -- under -- we will see reports on relatively shortly. I believe Fernald and LANL are on here. I don't think I missed any, but could have. And we need to think in terms of

our functions and so forth, what's going to be needed in terms of -- you know, potentially needed in terms of reviewing those SEC evaluations and in terms of -- of certainly having a site profile review available would -- would -- is going to be helpful and...

DR. ZIEMER: Okay. Thank you. Oh, I'm sorry, I guess Mike, also -- Bob Presley, then Mike Gibson.

MR. PRESLEY: Jim --

DR. ZIEMER: Go ahead, Bob.

MR. PRESLEY: The NTS TBD is a little over two years old now. Do we -- do you know if we have been sent the copy of the matrix created by SC&A on that, or do you all have the --

DR. NETON: Do you mean has the Board been sent a copy?

MR. PRESLEY: Yeah.

DR. NETON: I believe the Board received a copy of the matr-- the comment resolution matrix, yes.

MR. PRESLEY: Okay.

DR. NETON: But I can certainly re-send that if -- if you like.

MR. PRESLEY: Do you remember getting -- any of

y'all remember getting it? We've --

DR. NETON: Normally --

MR. PRESLEY: -- had so much that --

DR. NETON: Yeah, normally when those come out SC&A distributes them to the Board and NIOSH simultaneously. But you know, I can't swear that it happened, but that's the normal process and --

MR. PRESLEY: Yeah. I just don't remember it, it's been so long.

MS. MUNN: I don't, either. We can ask that it be sent --

MR. GRIFFON: (Off microphone) (Unintelligible) re-send -- re-send it.

DR. MAURO: To help out a little bit, we ran exactly into this situation on Savannah River with such a -- a delay, so any of the working group members who don't have either the report itself for some reason -- you know, so much paper -- or the -- the matrix, just let me know and we will deliver it, just as we did in your -- in the case of Savannah River.

MR. PRESLEY: Could you -- could you go ahead and re-send that to --

DR. MAURO: Both the report and the matrix or

just --

MR. PRESLEY: Please.

DR. MAURO: We'll take care of that, so you -- it'll come out electronically --

MR. PRESLEY: To the --

DR. MAURO: -- or hard copy, whatever you --

MR. PRESLEY: Hard copy, please.

DR. MAURO: Hard copy.

MR. GIBSON: Electronic.

MS. MUNN: Electronic.

DR. ZIEMER: Mike Gibson, a comment.

MR. GIBSON: It's switching gears a little bit, but just a question and a comment. How are the point of contacts chosen for the -- the sites to respond to SC&A?

DR. NETON: Well, Stu -- Stu might be able to help me out a little bit with this, but you know, we have limited resources. I know a lot of the -- a lot of it was based on availability, but I'll let Stu comment.

MR. HINNEFELD: Well, our -- our point of contact, recall, is sort of a -- a coordinator because he essentially collects the questions, provides them to ORAU, who works up the responses and things like that. So we've kind

of selected people that -- you know, some knowledge of the site, if we can. You know, if we've got somebody who has some knowledge of the site, we kind of select them to do this coordination task.

MR. GIBSON: Okay. I guess that was kind of my concern. I'm getting back to this conflict of interest or perceived conflict of interest. Take Mound, for example. Point of contact there certainly has knowledge of Mound, but also has worked intimately, closely and in the same areas and may possibly have worked for some of the people that were chosen as site expert to do the Mound site profile. So that -- that seems a little too cozy that, you know --

MR. HINNEFELD: Well --

MR. GIBSON: Someone should -- have -- if they take site profile information from the site experts, it shouldn't matter -- it shouldn't have to be someone with Mound history to relay that information to SC&-- to respond to SC&A's questions.

MR. HINNEFELD: Well, I mean it wouldn't have to be. We felt like they might be able to more

readily come up to speed on the nature of the question and -- and assess it and so that's why we made the assignment. I mean he and -- and Sam Glover, for that matter, is conflicted at Los Alamos, so if -- if that is, you know, something we should avoid at this step, we can do that. We didn't feel like this person has a particular decision-making role at this point. All they are -- collecting questions, consolidating questions, you know, scheduling conference -- telephone conference calls and things of that sort. And so we essentially selected people with some knowledge of the case because we don't feel like these people are particularly decision-makers at this point.

MR. GIBSON: Well, again -- but -- I mean if you guys got the information down in black and white from the site experts, your point of contact, to me, is just -- just a conduit --

MR. HINNEFELD: Yes.

MR. GIBSON: -- to relay that information.

MR. HINNEFELD: Exactly right.

MR. GIBSON: And so it just -- to me, it seems like a very cozy relationship that --

MR. HINNEFELD: Okay. Well --

MR. GIBSON: That's just my opinion.
MR. HINNEFELD: Those -- those two individuals essentially have completed the task of, you know, consolidating the comment -- or the responses to the questions and providing them back. Those are the two where we are at that point.
MR. GIBSON: Right.
MR. HINNEFELD: We can -- you know, for future point of contact work on resolving -- you know, once the report is written and resolution, if it's the Board's -- if the Board's desire, we can make -- we can avoid that, because you know, we consciously chose, in many cases, okay, so-and-so will be able to get up to speed quicker, understand the questions quicker, so we put them in this role. And -- and because we don't feel like they're decision-making at this point. You know, they're sort of consolidating. So we -- we intentionally chose them in some cases for that reason.
DR. ZIEMER: Okay.
MR. HINNEFELD: But like I said, they've completed that role.
MR. GIBSON: Well, again, I -- I don't un--

really understand the getting up to speed. If you've got black and white documentation from site experts and SC&A asks a question, it looks like the point of contact would simply turn to the documentation and answer the question rather than maybe speak off the top of their head for --

DR. ZIEMER: Okay, let's --

MR. GIBSON: -- (unintelligible) personal (unintelligible).

DR. ZIEMER: -- return to this in a moment.

CONGRESSMAN JOHN HOSTETTLER

We'll interrupt the proceedings for a moment and welcome a fellow Hoosier to the room. You all know what a Hoosier is, don't you?

MS. MUNN: Of course.

DR. ZIEMER: What is a Hoosier, you ask. It's a person who's dribbling a basketball around the Indianapolis Speedway while hunting for mushrooms. Representative John Hostettler, serving sort of the southwest portion of our state, welcome, sir. We'd be glad to have you address the Advisory Board. You can use the podium or the mike in the middle, whichever is comfortable.

CONGRESSMAN HOSTETTLER: Thank you, Mr. Chairman, and that is as good an explanation of a Hoosier as I have heard, having lived there my whole life. It's a matter of some significant controversy, so I appreciate that contribution.

I want to thank you all for giving me the opportunity to appear before the Board today. I serve as Chairman of the Subcommittee on Immigration, Border Security and Claims, the subcommittee with jurisdiction over claims against the government, and thus with oversight responsibility with regard to the Energy Employees Occupational Illness Compensation Program. This Board serves as the essential check and balance to ensure science used as the basis for compensation decisions is reliable and thorough in its substance.

As you know, the fair review of claims under this program faces many obstacles due to missing or inadequate records. Additionally, as we have verified through historical documents uncovered with regard to some facilities, there is a real possibility of data tampering that shadows the reliability of

records throughout the complex.
I appreciate the substantial work that each one of you have taken on. I also comment NIOSH for keeping the Board's work open to the public, transcribed and publicly noticed, because transparency is vital to the credibility of actions under the program.
There has been a question raised about the motivation for the Subcommittee hearings that began in March, and so let me make my motivations clear. As Chairman of the Subcommittee tasked with oversight on EEOICPA, I have been looking with -- I have been looking whether the program is fulfilling the purposes of the law, to ensure workers made ill due to their work on the nation's defense nuclear program receive the assistance they need, the compensation they deserve, and a fair evaluation of their claims. I have not jumped into this issue because I have a major facility in my district. There are a small number of claims from the Dana Heavy Water facility. However, my motivation is the belief that the Cold War era workers, many of whom were deceived as a matter of government policy and

subjected to dangers unwittingly, deserve our thanks as a nation for their service, and fair and honest treatment in the processing of the claims for the physical harm they suffered because of that service by all of us, and especially the agencies responsible for running the program.

To that end, the Subcommittee asked GAO to conduct a series of evaluations, looking first at the implementation of Subtitle B, and later at the roles of NIOSH program staff, the Advisory Board, and the audit contractor, and whether cost increases related to the audits were reasonable. More recently we have asked GAO to assess the ORAU contract and implementation of the NIOSH conflict of interest policy.

Because I so strongly support the mission of this program, a particular concern was sparked when the OMB pass-back document was brought to my attention. This document's call for administrative steps to be taken which would work to reduce the number of SEC approvals in order to, quote, contain the growth and benefits under the program, end quote,

compromises a core principle of the program. When data is missing or inadequate, classes of workers are to be put in the SEC, not refused inclusion when someone deems the cost too expensive.

While we are investigating the pass-back options to provide administration review of SEC petitions, to alter the balance of the Advisory Board, and to impose constraints on the Board's audit contractor, there is no intention of intruding on the Board's work.

That being said, there is concern that two members of the Advisory Board have been selectively removed from the White House without cause, and now only two of the 11 workers repres-- members represent workers. No effort has been made to rebalance this Board to meet the requirement for a balance of, quote, scientific, medical and worker perspectives, end quote. It is imperative that this be resolved to the satisfaction of the claimant community and thus to the representatives here in Congress because they look to this Board to assure them that their claims are being considered fairly.

The Director of NIOSH testified before our Subcommittee on March 1st that NIOSH was developing a new conflict of interest policy, and I commend him for soliciting your input and that of the public. In that regard, I urge you to maintain the current conflict of interest requirements for your audit contractor so that the independence of individuals working on this project are beyond reproach.

Also with regard to the audit contractor, testimony from DOL at that same hearing expressed concern that individuals working for NIOSH were barred from some work because they were experts on behalf of DOE or its contractors in litigation, but there were no constraints on the work of the audit contractor or their associates if they had supported claimants in litigation against DOE. While this equal bias standard appears to make sense in theory, in practice the primary concern is that the work of NIOSH and ORAU be audited in a way that leaves no stone unturned by parties whose work has the confidence of the claimant community, regardless of their past actions. Given the history of the nuclear weapons

complex, if experts are excluded due to their work on behalf of claimants, all EEOICPA claimants may be short-changed. The whole point of this review process is to overcome the doubt created through the government's deception early on, and the questionability of honest and reliable information being the basis for claims processing. To fulfill this intent, claimants need reviewers asking the questions that speak to their interests.

Finally, I'm concerned that DOL bracketed out the funding for the Advisory Board and its audit contractor in their FY '07 budget request. In FY '06 the Congress specifically allocated four and a half million dollars, to be drawn from the program fund, for the Board and its audit contractor to alleviate any attempt to stifle your review by limiting funding. Given the importance of your role in this program, many of us are considering the possibility that Congress may need to continue stipulating independent funding for your work, either through the appropriations process or through amendment of the law.

Again, I want to thank you for your willingness

to take on this important task, and all of your hard work -- and for all of your hard work to assure a measure of compensation and justice to these Cold Warriors whose government must not forsake them or their families a second time. Be assured that I will do as much as I can to support the integrity and transparency that you individually and the Board collectively bring to this program.

Thank you very much.

DR. ZIEMER: Thank you very much, Mr. Hostettler.

DR. WADE: I think we'll take a break.

(Whereupon, a recess was taken from 10:15 a.m. to 10:40 a.m.)

SITE PROFILE UPDATES (CONT'D)

DR. ZIEMER: We're ready to reconvene. Just before the visit by Representative Hostettler we were discussing the concern that Mike Gibson had raised about the -- what do we call those folks who are coordinating the efforts? Anyway --

MR. GIBSON: Point of contact --

DR. ZIEMER: Point of contact, the point men -- or point people. So we can continue that. I

think Stu -- Stu had made some comments. Perhaps Larry has some additional comment to make -- Larry Elliott.

MR. ELLIOTT: We'll change -- I -- I -- if there's a perception that a person serving as a point of contact can exercise influence in that effort, you know, I don't want to -- I don't want to -- I recognize that concern and we'll just change the points of contact.

DR. ZIEMER: Mike?

MR. GIBSON: I'd like to just say I appreciate that, Larry, and I think it's a -- I think it's also a wise management move, that it could help NIOSH or OCAS broaden your management base as far as your people getting knowledge of all the sites.

MR. ELLIOTT: I would agree with you that -- first I'd say there's a learning curve, but that -- that's okay. We'll let the learning curve happen and -- and I'm a believer that we've got good staff who would maybe come out through -- from that learning curve and have perhaps a different perspective than somebody who lived through the -- the work at a given site.

DR. ZIEMER: Okay. Thank you. Any other discussion on that? Jim Melius.

DR. MELIUS: Yeah, just to follow up a little bit, I -- my concern would be if that point of contact is going to develop into someone that takes a more active role in some of the resolution issues and -- and so forth, were going to have a little bit more public involvement at that point in time and so forth, then it -- it could be -- become awkward -- that. And so it -- I think it's -- it's sort of how you're planning to sort of use your staff over the long term and get them up -- you know, involved in a particular site and in handling a site, so --

DR. ZIEMER: In this solution that Larry has now indicated, there probably would not be a concern then if the person did get somewhat involved in resolution, although I think Stu indicated the anticipation was they wouldn't certainly be in a decision-making mode at all, so -- but perhaps could be involved more than otherwise.

DR. MELIUS: Yeah, I think as -- as things got -- yeah, again, depends. If it's simply to

pass along information, it's one thing. If it's going to be involved in the -- the workgroup meetings and so forth as they come about, I think that's where it gets a little bit -- could become -- again, it's a perception of a conflict and -- and not to -- I don't know any of these individuals and not to, you know, say that they would be conflicted or are conflicted, but just the fact that it just -- I think it's important that we have -- try to be careful on those type of -- that type of arrangement.

DR. ZIEMER: Dr. Neton.

DR. NETON: Yeah, I think it is a little more than just passing through the information. It was the intent for that person to take over a role similar to what I'm -- I've done for Y-12 and Brant Ulsh has done for Rocky Flats, to sort of serve as the coordinator, maybe, of the effort. And I understand the issue and, you know, we'll proceed as Larry has -- has suggested.

DR. ZIEMER: Robert Presley.

MR. PRESLEY: Well, I don't want to speak against the thought, but we are and the people

that work for NIOSH, they are the experts in this field at what they're doing. To just come up and say everybody has a conflict of interest I think is ridiculous. I'm going to go on record with that. I think that there ought to be a median ground here. If you've got somebody that -- that -- yeah, that was there or -- or where they can -- they can influence a thought or something like that, but I sure like the fact of using expert people to get the job done. I think we can get it done faster and better if we pick our experts, and that's all I would like to ask. And I think that's -- I think that's what you're doing.

DR. ZIEMER: Larry?

MR. ELLIOTT: To change the points of contact is, in my opinion, not going to preclude our ability to draw on -- I believe J.J. Johnson was the person that was identified to be on -- the point of contact for the Mound site, and I don't believe Mike ha-- you know, is raising personal issues about J.J. But I think certainly it does not preclude us to approach J.J. as we work through the Mound -- any issues on Mound and say J.J., what are your thoughts.

He is a site expert and we utilize site experts that way. And we will fully attribute whatever contribution they make and we'll make that well known. It will be transparent.

DR. ZIEMER: Thank you. Other comments?

MR. GIBSON: I just --

MR. ELLIOTT: I would add that he doesn't have decision authority. That's not going to happen.

DR. ZIEMER: Okay. Mike.

MR. ELLIOTT: That's one thing we do exclude in the process.

DR. ZIEMER: Yeah, Mike. Additional comment?

MR. GIBSON: Just a -- a brief comment to in a way respond to Mr. Presley, just -- you know, it goes both ways. I mean this year on my conflict of interest statement I took a six-hour bus trip around Fernald for a non-profit organization and now I'm conflicted for Fernald.

DR. ZIEMER: Well, hopefully some of those can -- in the final conflict of interest thing it won't count if you drove past that site on your way to Florida, but --

UNIDENTIFIED: (Off microphone) We're working

on it. We're working on it.

DR. WADE: Could I take a moment?

DR. ZIEMER: Sure.

DR. WADE: Since all Board members are here, let me talk to you about upcoming schedule of meetings, based upon your availability. First of all, you know that we have a call scheduled for August 8th. We have a face-to-face meeting scheduled for September 19, 20 and 21. We're looking at Nevada as the location. We now have a call scheduled for October 18th; a face-to-face meeting scheduled for December 11, 12 and 13; a call scheduled for January 11th -- that's the year of our Lord 2007, believe it or not --

MS. MUNN: Wait, wait, wait. Wait, wait.

DR. ROESSLER: Yeah, we don't have --

DR. DEHART: Could you start over so --

MR. PRESLEY: Yeah, where we can work on this.

DR. ZIEMER: He's telling you to put them on your calendars based on --

DR. WADE: Here we go. Call on August 8th.

MS. MUNN: Got it.

DR. WADE: Face-to-face meeting September 19, 20 and 21.

MS. MUNN: Right.

DR. WADE: Okay. Next, a call on October 11th -- October 18th. And then a face-to-face meeting December 11, 12, and 13.

DR. ROESSLER: Do you have a place?

DR. WADE: No. If you want to pick a place for December --

DR. ROESSLER: Let's pick a warm place.

DR. MELIUS: North Pole.

DR. WADE: I mean I -- the reason I keep it open is just because we don't know where the action will be and --

DR. ZIEMER: We talked before about Pinellas, and I don't know where we'll be on that, but that's one area to look at.

DR. WADE: Right, we could tentatively pencil in Pinellas, but again, I think it's -- wisdom would dictate leaving it open. Then January 11th, 2007 is a call -- January 11th, 2007 is a call. And then February 6, 7 and 8 of 2007 is a face-to-face meeting.

MR. PRESLEY: What's the dates in February again, Lew?

DR. WADE: 6, 7 and 8.

MR. PRESLEY: 6th, 7th and 8th.

DR. WADE: So now we have three calls and three

meetings scheduled.

Thank you. Thank you for your -- the contributions with dates. Everyone was accommodating.

MR. CLAWSON: Dr. Wade, a question.

DR. ZIEMER: Yes.

MR. CLAWSON: I talked earlier about this and I was wondering if there's any way -- you know, especially some of us that sit on these small committees, you read the site profile and it brings a lot of things into question. Is there any way that we would be able to tour like say Nevada Test Site, be able to come in a day early or whatever because when you're digesting a lot of this information, a lot of it doesn't make sense sometimes just from the paperwork side.

DR. ZIEMER: And the answer is yes. In fact, I believe a tour is on schedule for Nevada Test Site.

DR. WADE: September 18 is what we're aiming for.

MR. CLAWSON: Okay.

MR. PRESLEY: Do you want me to start --

DR. WADE: Yes, please. Mr. Presley has

offered, based upon your suggestion, to set up a tour --

MR. CLAWSON: Appreciate that.

DR. WADE: -- and as soon as we get that confirmed, we'll ask those of you who'd want to attend -- many of you have been there, but that's the plan and thank you for the suggestion. And the effort, Robert.

MR. PRESLEY: Any idea right now who might -- who might want to go?

DR. ZIEMER: You want a straw vote of (unintelligible) --

MR. PRESLEY: Yeah, that way -- that way I can tell them how big of a bus and things like that.

(Pause)

Looks like seven and the staffers -- Larry, do you want any of your staff --

MR. ELLIOTT: Been there, done that.

MR. PRESLEY: Okay.

MR. ELLIOTT: The staff can go, though.

DR. ZIEMER: There may be --

MR. HINNEFELD: I would think you might want to plan for a couple of our staff.

MR. PRESLEY: All right. We're talking about a

half -- I mean a dozen people.

DR. WADE: Question about spouses.

DR. ZIEMER: Spouses.

MR. PRESLEY: Yeah, and I'll ask about that. They -- they probably can.

DR. ZIEMER: Okay. So there may be a couple more spouses --

MR. PRESLEY: Yeah, we're talking no more than probably 24 -- a dozen -- a dozen plus spouses.

FINALIZE SELECTION OF 6TH ROUND OF DOSE RECONSTRUCTION CASES, DR. PAUL ZIEMER, CHAIR

DR. ZIEMER: Thank you. We have on our agenda now the finalized selection of the 6th round of dose recommen-- dose reconstruction cases. The subcommittee, during its deliberations earlier this week, selected some -- or is proposing -- I think it's 25 cases, from which -- and assuming that some might have to be dropped for one reason or another, and some might carry forward, so I now call on -- I guess I call on the Chair of the subcommittee, and that's me, to give the report of what is being recommended.

This comes as a motion from the subcommittee. It doesn't require a second. Let me refer you

to the list of proposed cases. And we have -- we have selected some proposed cases from the document entitled "Full Internal and External," and we'll use the ending digits -- these all begin with 2006-06, and we were careful to exclude the 666 one --

MR. CLAWSON: By the way, that's the number of my facility, so...

DR. ZIEMER: And if that doesn't make sense to you, just ignore it.

MS. MUNN: I think that's my standard room number.

DR. ZIEMER: Your hotel room number. Okay. So Dr. Wade will read to us the proposed numbers. Those who weren't present for the subcommittee meeting may wish to mark these on your list and we'll have opportunity to make any final changes that may be proposed after the list is read. So here we go.

DR. WADE: The list includes 08, 18, 19, 22, 26, 31, 33, 48, 49, 65, 74 --

MS. MUNN: Two -- two.

DR. WADE: -- I'm sorry, 72, thank you -- 93, 96, 98, 106, 113, 125, 136, 144, 155, 163, 166, 171 and 181. In addition there were two

carried over from the fifth round that will be added to this for consideration.

DR. ZIEMER: So the list you just read is a list of 23. Is that correct? Or is that 25? I thought -- Did we -- did we include the carry-overs in the list?

DR. WADE: I count 24 on the list I just read, plus two carry-overs.

DR. ZIEMER: Okay. One -- one of the issues we will have is -- is if -- if none of these are disqualified -- for example, if they're pulled from the finalized list by Labor and have reworks or something like that. Let's suppose all of these are truly finalized cases, we need to have some guidance as to how to proceed forward. I would suggest that we utilize the two that were carry-overs as the first two, and then take the next 18 on the list, unless someone objects or has an alternate suggestion that everyone likes better -- and that won't hurt my feelings, so -- any objection to that, that we --

MS. MUNN: No.

DR. ZIEMER: -- start with the two carry-overs and then proceed down the list in order? And

anything left over will carry onto the next group of 20 then. Is that the understanding?

MS. MUNN: Sure, fine.

DR. ZIEMER: Any objections? Any -- anyone wish to offer any changes or modifications to the list? We can -- we can drop some, we can add some.

(No responses)

It appears that there is no movement to change. Am I correct? Are you ready to vote then?

MS. MUNN: Sure.

DR. ZIEMER: So the vote would be to approve this list, which is thought to be 24 or 25.

MS. MUNN: 24 plus two.

DR. ZIEMER: Is it 24?

MS. MUNN: Uh-huh.

DR. ZIEMER: Okay. Whatever it is. All in favor say aye.

(Affirmative responses)

Any opposed?

(No responses)

Are there any abstentions?

(No responses)

Thank you. The motion carries and this will constitute then the basis for the sixth round.

DR. WADE: One slight clarification for the record. Depending upon what winds up on the list, the Chairman might have to look at the team assignments and do some slight adjusting to keep the numbers about the same, and I -- I would assume he would have that prerogative.

DR. ZIEMER: Right. Now we haven't done the team assignments on this list yet. We did team assignments on the -- on the fifth round list, I believe.

MR. PRESLEY: Uh-huh.

DR. WADE: Correct.

DR. ZIEMER: So -- and I don't think we need the team assignments before our next phone call next -- yeah.

DR. WADE: You're right, I don't think we do.

DR. ZIEMER: Okay. So let's -- let's move on.

SC&A REPORT OF SEC REVIEW PROCEDURES
DR. JOHN MAURO, SC&A

Let's see, we have next SC&A review of -- or SC&A report of the SEC review procedures. I think we have a brief report by John Mauro, and there should -- there's also a handout at your place for this. John?

THE COURT REPORTER: Oh, is this from yesterday, or is this on the --

DR. ZIEMER: This was the switch we made -- the -- the initial -- the initial agenda said SC&A presentation on 4th round. We did the 4th round yesterday. We did the switch, so we're now picking up what was originally scheduled yesterday in the SC&A time slot, which is called SC&A Report on SEC Review Procedures.

(Pause)

This -- the one you're showing there comes up after this.

(Pause)

What's the question?

DR. MAKHIJANI: Did you want the SEC review procedures or the Task III procedures review?

DR. WADE: SEC review.

DR. ZIEMER: SEC review procedures is the (unintelligible).

DR. MAKHIJANI: (Off microphone) That's the other one. That's the one that I (unintelligible).

(Pause)

DR. MAURO: (Off microphone) I thought you were interested in the review of the (unintelligible). One is dealing with the Task V SEC review procedures, the other is -- we

just completed a review on the Task III (unintelligible) procedure. I just want to make sure which presentation you'd like to hear at this time.

DR. WADE: The SEC review procedures.

DR. MAURO: Okay. My apologies, (unintelligible).

DR. WADE: For the record, we're interested in everything you do.

DR. ZIEMER: Right. This was the item we swapped with yesterday, so...

(Pause)

And John -- John, my apology, the handout that I saw at the place I thought -- I thought was the handout for what I've described, but I see it --

DR. MAURO: We have two --

DR. ZIEMER: -- that was a little misleading, yes.

DR. MAURO: -- and we're prepared to address both.

DR. ZIEMER: Right.

DR. WADE: And we'll give you the opportunity to address both.

(Pause)

DR. ZIEMER: Again, this is officially called "SC&A Report of SEC Review Procedures".

DR. WADE: To set the stage, remember that there was a working group that looked at SEC review procedures, SC&A was looking at them, and then you were asked to sort of offer a blend.

DR. MAKHIJANI: (Off microphone) We submitted two reports to the Board. One was a review of NIOSH procedures for SEC and then the other was draft Board procedures and (unintelligible) procedures for reviewing the SEC last November, I believe, and then the Board adopted its own criteria and -- for reviewing SEC and the direction that was given to us was to revise the draft procedures (unintelligible) for the Board. And the contractor, in conformity with those and also to reflect the extensive experience that we've had in actually reviewing SEC petitions, a petition for Ames that did not have a site profile, Y-12 (unintelligible) the work reviewing the site profile and Rocky Flats (unintelligible) some kind of combination of the two. And so we submitted a revised report to you the week -- was it on the 5th of June,

something like that, or early this month. The initial procedures had been in three phases and they had envisioned that most of the work would have been after NIOSH submitted the evaluation report because a proposal had been written with the idea that there would be full reviews. But in the interest of timeliness, a lot of work has been brought forward and part of the direction of the Board as we viewed it was to do it in two phases. The first phase would be after NIOSH qualifies a petition for evaluation, but before NIOSH submits the evaluation report, to make a preliminary investigation of the petition, what are the issues, and then -- and related documents and their site profile of that. I'm going through the phases. But -- but basically to do one phase before NIOSH publish-- publishes evaluation report and the second phase after it publishes the report and the second phase could be a full review or a partial review -- or no review at all, depending on what the Board decision would be. And throughout the -- the touchstone, of course, is the feasibility of dose reconstruction under 42 CFR 83 and is a

dose reconstruction with sufficient accuracy possible. And in fact it's the way it has worked out in our experience is usually we're looking at is the dose reconstruction a maximum dose or a plausible assumption possible and then NIOSH might do it with more accuracy if they feel -- but the -- the main criterion is can you bound the dose with some reasonable circumstances, and if you can do that, it's not an SEC issue and if you can't, then -- then it becomes an SEC question.

So this is the detail of phase one. NIOSH qualifies the petition and informs the Board. The Board designates a working group, so this is the procedure as we see it that the Board had been following, and the contractor works according to whether the Board wants us to be involved in any particular phase of this. We had initially suggested that NIOSH provide a detailed SEC-specific evaluation plan, which is mentioned in the regulation. NIOSH has said (unintelligible) provided a general evaluation plan (unintelligible) creating a -- a formal document would be very cumbersome and delay the process. I think the Board agreed with that.

At least that was our understanding that there would not be a formal petition-specific evaluation plan but that in its place documents that NIOSH is using (unintelligible) made available to the working group. NIOSH would communicate in some way what it saw as the issues and the working group makes its own list of issues that could be drawn from the petition, the site profile review if there is one, and document review. And of course the working group may assign tasks to the contractor, as it has been doing.

So this is sort of further -- further development. Part -- a part of what has happened is a lot of the issue-specific development then revolved around two questions broadly, are the data available, are the data valid, and that the are the types of data that we look for, which are personnel monitoring data, air concentration data, (unintelligible), job types -- and this has to be done for every period and the different type of processes.

And as you saw on the Y-12 petition, looking at specific radionuclides and specific processes and the Cyclotron and the Calutron and so on,

this -- this ultimately had a considerable importance and the data validation and integrity questions have also been quite important, both -- both at Y-12 and in one case it clarified that a lot of other data were actually valid and could be used, and then there was some portion of data that could not be properly validated, like urine and (unintelligible) data, and then how it was to be used was also resolved in the (unintelligible). So very important and sort of precedence and methodological processes are being put in place, and those have been incorporated into the details of the report. I won't go into that here.

But at -- at this -- in the preliminary stage, the bottom line, in a way, would be the last bullet here, to define to sample full or partial dose reconstructions that NIOSH would actually do to demonstrate that it can -- you know, can -- that -- actually do dose reconstructions, dose reconstructions are feasible, if that's the direction in which NIOSH is going.

So these are the (unintelligible) procedures.

Part of what is in these procedures is there would be at least a preliminary interview with at least one petitioner. In the case of Ames, for instance, I sought Board permission to talk to Dr. Fuortes. I sought his view of his petition. I asked him where there might be additional documentation that he might have looked at. This is a preliminary contact and not a -- not a full-blown, formal interview. This not -- not to drag out the process in the initial stages. I asked him his opinion of who the best site experts were for me to get a grip on who might know what all data was available. I interviewed Dr. Warf*, whose -- he was just an amazing interview. I won't go into it, but it was just -- it was a real pleasure for me to -- and a privilege for me to talk to him, how -- how clear his memory was, how much fun it was (unintelligible).

So we -- we prepare by reviewing the documents and the petition and (unintelligible) site profile review an initial list of issues. And I think preparing an initial list of issues from the petition is extremely important because that gives the proper place to the

petitioner in the process, that something they have said in the petition, whether it's about records not being available or missing or data integrity or like the high-fired issue. But if it's given appropriate consideration by the working group, and by the contractor if the working group desires -- I think the Rocky Flats high-fired report has been (unintelligible) very good example of that. The -- and then again, the bottom line to this preliminary assessment would be a list of examples. Now in the case of Ames it was not necessary because our preliminary evaluation indicated to us that we just (unintelligible) -- the data just weren't there to do dose reconstruction, so we just stopped and informed the Board at that point that we'd arrived at the end and stated the resources and NIOSH filed their report and -- and we went on from there.

I think, just for your information, about 1,000 hours were allocated to Ames, and in the end I think it all got done in just a shade over 300 hours, because we stopped the process where we (unintelligible). And then the other -- the

other review, which took more resources (unintelligible) something available within the budget to do that.

So if a site profile review is available, then there are some additional things that we do from that as we have been doing. We go through the matrix and extract the issues from the matrix and the site profile review, added to the issues raised by the petitioner, and examine the questions of job types and radionuclide -- just -- just for an example, for instance, the -- the other radionuclide issues in Rocky Flats are the thorium issue and exotic radionuclide issues were raised in our site profile review and that's how they wound up in the SEC issues list that we prepared. And I -- I personally wasn't involved in that, but I was involved in the SEC phase of it, but I relied on the site profile review plus the other documentation (unintelligible) my starting point.

If there's -- if there's site profiles, we do a site -- targeted review of the site profile. We don't necessarily aim to produce a document from that. I haven't -- I haven't -- if

there's no site profile, then we do what we did on Ames. We do a preliminary check of the documentation to see what's available. We don't necessarily evaluate the whole (unintelligible) documentation. I was convinced (unintelligible) interviewed Dr. Warf* and -- and talked to Dr. Fuortes and looked at the documentation that there was no documentation on the plutonium experimentation and so on, there was nothing -- NIOSH confirmed that, so we just -- we stopped looking (unintelligible) something and wait for NIOSH to deliver something.

So (unintelligible) we will not be creating a dummy site profile or a mock site profile or a substitute site profile. That's not the objective of this task.

After the evaluation report is submitted, of course, the Board has -- has three options and historically has exercised all three in one way or another -- accept the ER and vote on it; accept it partially, which is what was done on Nevada Test Site, and investigate (unintelligible) more and -- or review the ER further, a partial or full review.

So here -- if there is a review, a full review would include these. Of course a partial review, then the Board and the working group could select (unintelligible) sample dose reconstruction done, documentation cited in the evaluation report, the question of validity and representativeness of the data -- and a lot of this you will recognize comes from your criteria in terms of feasibility of dose reconstruction, representativeness of data and so on. And the two phases of course are of course addressed in (unintelligible) question which has been a central part of your discussion. Sufficiency of data to sustain individual dose reconstruction and coworkers models, procedures to fill in missed doses -- we've gone through all of these in one way or another in the -- in the SEC petition and evaluation report that are so far -- so far been evaluated. The last bullet of course is an item of active discussion -- has been an active -- active discussion at -- at this Board meeting and there are some views before you for resolution, but this would be a standard item, depending on what guidance you provide on this

question at review, as to how we would do that. There's not -- there's -- other than suggesting some things that are there in the report along the lines of what we did at Ames, there's not a (unintelligible) procedure because this is really a (unintelligible) resolution problem more as to how (unintelligible) radiological controls needs to be looked at. This -- the way we did look at it in the question of Ames, it was a combination of a lack of monitoring data altogether for most of the period, plus an obvious lack of radiological controls -- no ventilation, no hoods, no monitoring and so on that -- and very high dose -- committed doses in -- in one day's intake that led to the kind of idea (unintelligible) presented.

So this -- this -- I think that the Board wanted some criteria for a data validation that was part of the working -- working group's recommendation. This is what we have been doing, comparison with the raw data, the (unintelligible) records (unintelligible) examination of patterns of data entry, patterns of incident data and worker files (unintelligible) questions and so on and

(unintelligible). So I think we -- we have about as reasonable a general approach -- in each case of course the data (unintelligible) different because the site records are so varied.

These are the deliverables we suggest. We are -- we have suggested that the phase one not be very rigid in terms of the deliverables. It might be, in the case of Ames, that we did a lot of the work, but we held off on putting effort into actually writing a report so as to not be second-guessing NIOSH and what they were coming out -- we felt probably if they saw the data the same as us, they would recommend an SEC. And if they didn't, then there would be a fairly lengthy evaluation and resolution process, so we deferred the deliverable to phase two.

In the case of Y-12 and Rocky Flats, we've been producing issue-specific short reports, memoranda, issue lists, and so it's very petition-specific. And we would suggest that in phase one our deliverables remain flexible and at the direction of the Board (unintelligible) the process. But then in

phase two some kind of final report so that (unintelligible) on our part we deliver to you, as we did in the case of Ames, as -- maybe the record in phase one would stand as a final report, perhaps as -- as has been the case -- well, no, we did -- we have done final report for -- for Y-12 (unintelligible) and we anticipate doing that for Rocky Flats.

I think that's the end.

DR. ZIEMER: Okay. Thank you very much. Board members, the actual report is dated June 12th, so --

DR. MAKHIJANI: (Off microphone) (Unintelligible) the Y-12 report.

DR. ZIEMER: I think -- yeah, I'm looking at the report. It's June 12th, which means if you got it -- you may have gotten it before you left home if you -- or you may not have received it, that -- I think both hard copy was sent out perhaps by FedEx and -- and we also got it by -- electronically.

This -- this document was a result of a recommendation that actually came through your subcommittee, Jim, to -- to try to in a sense coordinate this -- the Board's policy with your

earlier document. Jim, I know the subcommittee hasn't had a chance to really look at this report at all, but do you have any comments at this point? It seems to me at some point we -- we may want to officially in a sense adopt this or at least indicate that this is the direction that we expect the contractor to take when they review the SECs, or modify it appropriately. So let me get your response there and then we'll hear from John.

DR. MELIUS: Yeah, my -- my personal view is I think this is -- I think we've got this approach down -- down pretty well, as -- as well as it can. There -- it has to be a flexible approach. I think having the -- the two phases worked very well in Ames. I think it'll work well in -- in other situations, albeit every situation's going to be -- be different for -- and I had a chance to read through their report and -- frankly, on the plane on the way down here, and it -- I think it's satisfactory. I think, to be fair to other people, we probably should fall -- give everyone an opportunity to review it, and then maybe have a formal closure, perhaps at our --

DR. ZIEMER: Next meeting or --
DR. MELIUS: -- conference call or -- yeah.
DR. ZIEMER: And I'm on the subcommittee and have reviewed it and I -- it appears to me that it aligns quite well with our policy. John?
DR. MAURO: Yeah, I just wanted to make a couple of points. The report, the version that some of you have seen, your -- and some of you will see when you get home electronically, you will be receiving a hard copy, does have attachments to it. One is -- is -- is the working group's January 16th, 2006 document, so it's made part of ours. In addition, we have another attachment which actually tries to map all of the criteria that are in your working group document with our report, so that you can see the one -- the correspondence between the two. And there's a lot of additional material in the -- the main body of the procedures which tries to directly address the criteria that are outlined. So in addition to reflecting the -- the experience that we have gone through and what -- the reality of how Y-12 and Rocky is proceeding, we also try to marry in this other document.

One more point I'd like to make, which I think is -- is important, is this two-phase process worked very well. If you recall, the evaluation reports came out I believe -- for Rocky and Y-12 -- on January 7th -- I'm sorry, January -- April 7th, and I think closure, at least on Y-12 -- so we're talking about April, May, June -- a two-month period to go from when the evaluation report came out to -- on Y-12, in any event -- and -- and a vote by the Board. And the reason that was possible is so much was done in the early phases to -- to allow the process to mature. So I think our original intent to expedite that post-evaluation report process seems to be working.

Now how well it will work with Rocky is yet to be seen --

DR. ZIEMER: Right.

DR. MAURO: -- because on the same date, April 7th -- I believe that's when the Rocky evaluation report came out, but as you all know, we're -- we're really in the middle of that process. I'm not quite sure, you know, how -- how protracted that will be.

DR. ZIEMER: Thank you.

DR. MAKHIJANI: (Off microphone) Just to (unintelligible) that, Dr. Ziemer, also Ames report came out about the same time (unintelligible) with that, but we were, as Joe has often pointed out, a lot further behind on Rocky in terms of our evaluation (unintelligible) site profile review, so that's part of why -- so we kind of grafting the site profile review onto (unintelligible).

DR. ZIEMER: Understood, right. Dr. Melius.

DR. MELIUS: Yeah, I think another way of looking at this is that phase one is sort of can we improve the efficiency and timeliness of the process, what extent can we get started in terms of the evaluation while we're, you know, letting NIOSH do -- independently do its evaluation report, which I think is -- the independence of that is important, but at the same time be ready when that evaluation report came -- comes out and I think that part has -- has worked so far.

Phase two is really the -- in some ways the more formal part where we real-- we have an evaluation report and we review it and -- and I think, again, that -- while it's more

straightforward, we just don't want it to have to go on -- you know, be delayed inappropriately if there are things we can get started on, and it worked well -- the other thing I think happened with Ames I'd point out is that in the fir-- initial call that we had, I believe in April -- early April with the petitioner, we were able to identify, you know, the two issues -- the residual contamination issue and then the episodic exposure issue that they were concerned about, that were sort of the -- and it allowed -- to make sure that we were able to start exploring that and getting information on it and so forth and -- and so that part was helpful and then involving the petitioner at that time, in that initial call, was -- was the -- did move the process along.

DR. MAURO: And sort of stepping back and looking back as the program manager, this particular type of approach -- whereas there's a lot of flexibility, the way we're handling this I think is important. And David Staudt and I have been in a lot of communication on this. The process is one where we initially, together, identify issues as early as we can.

And what we do at that point -- and remember, we're operating within Task V; Task V has a certain allocated budget. What we do then, as soon as we are authorized to proceed with let's say phase one on a given SEC review, as quickly as possible we identify issues, we do the best we can to estimate what we think the budget will be, and then I provide that information to the Board and to David. And then as that process matures and things change, and they have changed. For example, I will put out periodically what I call a heads-up, where are we, and -- for example, we tur-- this -- one -- this -- this is turning out to be fortunate, in this case. The cost associated with Ames is much less than what we anticipated. But unfortunately, the cost associated with Rocky is greater. So I would say on the order of every month or two I keep the Board, the project officer and the contracting officer appraised (sic), so this is an unusual circumstance because it's fluid, but I try to keep everyone apprised where we are. And this -- the reason this is important is because it has to do with at what point do you stop. I

know this is always a tough question, have we chased it down far enough, when are we satisfied with data validity. So I do the best I can to -- as new issues emerge with the working group, it's important to keep -- keep in mind where we are with the budget, how -- you know, so it's a -- it's a -- I'll use that word "tension" that Lew uses a lot, and I like that term. There's always this tension, and we're very much aware of this tension and we try to keep you folks apprised of it.

DR. ZIEMER: Good. Thank you, John. Now we don't need to take action today. I think what's been suggested here is that we perhaps formalize an action by the time of our next meeting, after the Board has full chance to digest the materials. In a sense it's a description of what we're actually doing, both Board-wise and contractor-wise. So it seems to me that there's no objection to proceeding on this basis in the interim, but we do want to take a formal action on it, and that will be a subcommittee task, Jim, for that SEC subcommittee to perhaps develop a recommendation.

DR. WADE: I intend that we have it on the agenda for the August 8th call.

DR. ZIEMER: Thank you. Now if I can figure out what SEC (sic) is supposed to report on next, I will call on them to do it.

FINALIZE REPORT ON 2ND AND 3RD SET OF REVIEW OF DOSE RECONSTRUCTION CASES, DR. PAUL ZIEMER, CHAIR

I think we -- we actually have -- what we have on the -- on the agenda is finalizing the report on the 2nd and 3rd set of reviews. Now Kathy gave us an extensive report on these dose reconstruction reviews. We talked about the matrix. Mark, the -- the subcommittee -- or the working group, actually, ended up providing us a status report, but we're not ready for an action on this at this time, is that -- that's correct, is it not?

MR. GRIFFON: That's correct.

DR. ZIEMER: So remind us, if you would, what we have bef-- and what will be coming. And I -- and I don't think we need an SE-- or an SC&A report at this time. We -- the subcommittee had the full report already.

MR. GRIFFON: Yeah, just as a reminder, and I think it's mostly the same audience, so a reminder that during the subcommittee meeting

we discussed the second set matrix, which was the second set of dose reconstructions reviewed, along with the third set and the procedures review matrix. So we have three matrices out there.

Since the last workgroup meeting I've added a Board action in the matrix, which indicates whether the -- NIOSH agree-- the number code that we have before NIOSH agrees to the finding or -- number six is a common one, that it's been deferred to a site profile review or -- or a procedure review or something like that. I added that column and -- but -- but hadn't had a chance to bring it back to the workgroup or discuss it.

Additionally, NIOSH -- and SCA -- provided some comments on the last draft, and then NIOSH also included a final column in a version of ma-- of the matrix that -- that Stu Hinnefeld was working from. He provided a -- an action, a NIOSH action as a means to start tracking these actions that are coming out of the matrices. So we -- we've got to get together at the workgroup level. We -- we decided on the subcommittee that it would be wise for us to

get together again as a workgroup and finalize the matrix that I've developed, possibly merging the two matrices or possibly keeping them separate. We're going to discuss how that should happen, whether the NIOSH action should be in a separate matrix. We all agree I think that the -- Stu has a -- has generated a separate report out of the matrices that -- that just lists the actions from all the matrices, and I think that's much more manageable going forward to just have a listing of the actions -- actions. So once we resol-- once we come to final resolution we'll bring that back to the Board and then we'll -- from there on we'll just have a -- a listing of NIOSH actions to -- to track and continue and make sure they -- they come to closure on. But I -- I think that's -- that's where we're at and we -- I -- the hope of everyone I think is that we're going to meet in short order to close out -- we're very close to closing out all three of these matrices, and I think we're going to meet and the intent is to possibly come to the August 8th phone call meeting -- send the final versions of these things out and

possibly bring them up to -- you know, to the Board at the August 8th phone call meeting. We -- we've -- we've had these out there for a while so we want to close out on these as soon as we can.

DR. ZIEMER: Okay. So basically that's second and third sets of dose reconstruction reviews, and also the procedures review matrix, which is the first item listed after lunch, so we're not ready to vote on that yet either.

MR. GRIFFON: Right.

DR. ZIEMER: Now in addition, talking about procedures review, we do have a summary of the SC&A review of the second set of procedures. And I'm not sure if we explicitly put this on the agenda, Lew, or was that to be included with the procedures review item?

DR. WADE: That was to be included.

FINALIZE REPORT ON PROCEDURES REVIEW
DR. PAUL ZIEMER, CHAIR

DR. ZIEMER: So I think we can proceed to hear that, which is -- so now the other document from SE-- SC&A, summary of SC&A review of the second set of NIOSH/ORAU procedures. These are all -- these are all procedures that were not in that original matrix that we talked

about, so...

(Pause)

DR. MAURO: Yes. Under Task III we were authorized to review a set of -- second set of 32 procedures. That was -- the review of those procedures has not quite been completed, but we have delivered a draft report to you folks on dat-- the date of June 8th. You received it electronically. You will be receiving hard copy and we're calling it Supplement 1, same title as the first one, but it's a supplement. And basically what this does is that document addresses 30 of the 32 procedures. The 30 procedures include six external, 13 internal and 11 QA. Two procedures that are within the scope of that work that haven't been delivered to you today -- to date is like item three on this slide, have to do with the CATI reports. And I believe that was OCAS-TIB 90 and 92. We're working on it and we will deliver a supplement that you will simply insert into the back of the document -- soon. So that's the product that you folks received, which lar-- and by the way, which largely completes our deliverables for Task III.

We do have some workbook responsibilities. Workbooks are turning out to be interesting in that imbedded in the review of these procedures are the review of workbooks. Imbedded in the review of many of the cases that we are looking at under Task IV are a review of workbooks. So our plan is to collect -- since we do have a separate deliverable that we owe you dealing with the workbooks, we bel-- and a lot of that work's been done as part and parcel to this kind of material, I would -- my plan is, unless I receive direction otherwise, is to extract that material and get it into a form that would actually be a deliverable dealing specifically with workbooks so that we can meet that commitment in a clear and unambiguous way. But the reality is, a lot of workbook review of the material has already been accomplished.

Okay, this is a summary of the findings. If you recall, every procedure, when it's reviewed, is -- a checklist is used. And the technical procedures -- those are the ones dealing with internal and external dosimetry -- they have a total of 27 criteria that we score the procedure against. And the quality

assurance procedure reviews that we perform, they -- that's a different form and they have a total of 21 criteria.

So what I did was say okay, to the 19 technical procedures, I tr-- on the left-hand side of this slide, I tried to show how the scoring ended up. Turns out the scoring ended up very well (unintelligible). A score of 5 means the procedure is perfect. Okay? A score of 1 means we found some significant deficiencies. And then of course there's everything in between.

As you can notice that everything out of the collection of 19 technical procedures, two hun-- there are a -- the total number of -- the scoring by far were 5s against all the criteria. So we're -- I guess where I'm going with this is that these procedures are -- are very good, excellent in many cases. We'll talk a little bit more about the few places where there are some deficiencies, and I'll get to that in the next slide.

The QA procedures, yes means yes, it meets the criteria; no means it doesn't. There are 25 yeses that emerged, 14 no’s. The 14 no’s are a

little bit misleading, and -- and very quickly, it's really things like the title page wasn't properly filled out, there was a -- in other words, we have a checklist which is -- these are minor issues.

The only single -- and I'll -- again, I'll -- the only single thing that we found out that I think might be important regarding the QA procedures is each QA procedure deals with like a slice of the over-arching QA program, which is a ver-- which is a vast program. The role of each slice that one particular procedure place within the context of the overall QA program is not always apparent when you read the individual procedure. So very often it's difficult to see in the context within which the given procedure is within the -- within the overall array of procedures that govern quality assurance, so that was a recurring theme. I would say out of all those no's, that is the one finding that we saw -- we repeatedly found was a better job could have been done in setting -- what I call setting the table. This procedure -- its role within the bigger context.

But now let's move on to the 19 technical procedures and ma-- our principal findings are -- the procedures are satisfactory to excellent. Quite frankly, the -- we were very critical in the first set of 32, and in fact we're still in the process of closeout (unintelligible). We're not going to have that situation in this second set. The -- the principal improvements (unintelligible) really seen in terms of this set of procedures are the -- the -- there's no doubt a great effort been made by NIOSH to integrate the-- by the way, these -- these, remember, are generic procedures. These are not like a Y-12 procedure or a -- these -- these are the generic procedures that cross all -- go across all sites. So what was done -- you can see a significant effort was made to cross-reference between these procedures and site profiles so you have context. So when a person's reading this procedure, it is a bridge to site-specific, and that was -- that's very helpful, which is a -- a major change from the previous set. And I -- I'll go as far as to say the last -- in general, the procedures are -- are

well-written. They are consistent, concise, well-organized, technically defensible and appear claimant-favorable. We were -- I would say the overall -- overall (unintelligible), and there's a large number of different people work on this. I -- I -- I did -- I review number -- reviewed a number myself, but I handed out a lot of procedures out of the 32 to different specialists, and -- and there was -- and every -- consistently there was a -- a generally favorable response to the procedures. They were short, got to the point, and -- but -- but in a way, these were a little easier because most of them dealt with a specific issue -- a specific technical issue, got right to the point and they turned out -- and they're very functional -- very functional procedures. But there are some deficiencies, and -- but there are not many. I mean when it's all said and done, this is our matrix in a -- in a simplified form what's important. One of the things we run across -- but I don't know if there's a fix to this. The first (unintelligible) is that there's -- a lot of judgment has to be used by the dose

reconstructor. They're the -- there's a series of procedures, for example, that deal with what -- when can you -- when do you use some default assumption that's very, very conservative. You do that when you don't have any data. Well, then you can fall back on a less conservative set of assumptions when you've got a little bit more information, and then you could go to realistic cases. But all of this is a judgment call by the dose reconstructor. Then there -- and I don't know if you could -- there -- there's a solution to this. The dose -- it's really left in the -- there's a lots of procedures out there that the dose reconstructor himself, using his judgment, will pick and choose the ones that he believes best serves the purpose of a particular dose reconstruction, and -- and a lot of judgment has to be made on the part of them. Perhaps just -- that's the nature of the beast and -- but we can -- what we're experiencing, in fact Kathy and Hans could point out, is that -- that one of the consequences of this is there are going to be inconsistencies in how these judgments are made. And we -- we sort of have

a -- fortunately we have a bird's eye view. We're looking at a cross-section and we can see that the -- the way in which one dose reconstructor would approach a problem might be somewhat different and decide to use this procedure instead of that procedure. So that's one important finding.

The other one, the second bullet has to do with occupational medical exposures. We believe the procedures that are currently being used do not fully disclose the uncertainties that are (unintelligible) to the use of X-rays or -- mainly X-rays. The fluoroscopies are fine. But the -- revealing the uncertainty in the range of doses that might be associated with X-rays, we think that is a -- (unintelligible) spread's bigger and the -- the discussion of the procedure gives our rationale. I'm certain we will have an opportunity to talk about all that.

The next bullet is ingestion dose. There's a procedure specifically for doing reconstruction of ingestion doses. As every -- as we know, we spent a lot of time on that subject on Bethlehem Steel. There will, I understand, be

a -- a revised Bethlehem Steel site profile, which I presume will incorporate the new ingestion dose calculation procedure so that basically the current procedure that we reviewed reflects the previous way that these ingestion doses were performed. Bottom line is the ingestion protocol -- dose protocol presumed that there's a direct relationship between the radioactivity concentration in the air and what the amount of ingestion is. One of our criticisms is well, very often you might have spills and maybe material on the ground, on the surfaces, that have no relationship to what's in the air. And as a result, you might -- that relationship -- there certainly will be circumstances where the amount ingested is directly proportional to the amount in the air, but there will also be circumstances where the amount ingested is -- is much more closely related to the amount that's on surfaces and not at all related to what's in the air, and I believe that is being worked on by NIOSH.
The next one is -- next bullet deals with the procedure for non-penetrating radiation, great procedure. It's -- it's a -- it's -- almost

reads like a textbook in terms of understanding how do you go about doing good external dosimetry for non-penetrating radiation. The only criticism we have there that might be important is that if you get a negative reading as you have a film badge and you're concerned about skin dose from beta (unintelligible), for example, or from weak photon (unintelligible), if you don't get a reading, that does not mean that you did not get a significant external dose someplace on your body. If you do get a reading, you're fine. You've got a reading that's of use. But that point needs to be made. That is, the fact that you don't have a reading doesn't necessarily mean that you did not get a significant beta dose at some other location on your body where the badge wasn't, and that's a point that needs to be made, and how do you deal with that. A very difficult problem, how to deal with that issue. That's the point that was made there.

We looked at the procedure on alpha/n reactions and we -- our res-- the (unintelligible) -- we had a nuclear physicist look at the protocol and the procedure that was laid out, and -- and

I didn't do that. His -- his reaction was he felt that the methodology was very dated. There's a lot more recent information on how to do that, and he made recommendations on the newer way -- new data and other approaches that can be used to calculate the alpha/n reaction and the exposures associated with (unintelligible). Certainly something we can -- Bob Anigstein did the work, and certainly we'll get together and we'll talk about that and that would be fine.

Finally -- and again, this is -- the last one is -- is almost related to the first one. The number of TIBs gro-- are growing continuously, which provide additional guidance -- additional guidance and -- to the point where its complexity is enormous. I'm not sure how best to do this, but there might be a -- what I would call a meta-document, like a road map, that would help someone understand this vast array of procedures and help the dose reconstructor navigate his way through the process. Because he's handed a -- a site profile, which might be a year or two old, might be in the process of being updated. Then

there is an array of at least 16 or more generic procedures, and then an array of, for each site, five or six OTIBs and they (unintelligible) each one and so what we're seeing is it is a mountain to climb. And if there's some way in which something could be done to help us and the dose reconstructors that have to implement these protocols -- I'm not quite sure what it is, but that was one of our over-arching observations.

And I believe that's it, let me see... That is it.

DR. ZIEMER: Thank you, John. And you've already suggested this, your last slide probably will be the basis of the resolution matrix for this review.

DR. MAURO: Exactly, yeah.

DR. ZIEMER: And let me add some comments. On your first bullet where you were -- your concern is on the sort of inconsistency that arises out of judgments -- potential, or I think you've actually seen some maybe real --

DR. MAURO: Yeah.

DR. ZIEMER: -- inconsistencies. It just occurs to me that one place that one might

learn how to do this sort of thing or to reach more consistency is from those whose livelihood is based on judgments, and that is the judicial system. And they rely basically on what are called precedents. You -- you sort of go back and say well, how were these judgments made before. It does achieve some consistency. It's not obvious that just because the judgments were made a certain way earlier that they're better judgments, but at least it does lead to consistency.

And it occurs to me that it -- and maybe this is done -- that it might be of value if somehow one could develop a kind of collection -- a case book collection like a decision of -- decisions on a certain kind of issue, and how have they been made by dose reconstructions in the past so that a current dose reconstructor could go back and say well, this is how it was done before. I -- it just occurs to me -- that's sort of a model that is based on the idea of precedent. Just a thought. It certainly would have to be explored. I'm not suggesting that's necessarily the solution, but it just popped into my mind and you -- when you

offered that issue of inconsistency --

DR. MAURO: What -- and (unintelligible) --

DR. ZIEMER: -- because in the judicial system that's sort of how it's avoided.

DR. MAURO: What might help is that -- I don't know if you recall, you did give us a mission for the deliverable which would be what we call a -- our roll-up report from the first three sets of cases, and we -- we did -- the first year was -- had 60 cases that were completed. And there -- there's a story that emerges through that.

DR. ZIEMER: Which is sort of like this that --

DR. MAURO: Which is exactly what we're talking about, and Hans and Kathy are working on that, and I think that'll help.

DR. ZIEMER: Okay, we have several comments -- Mark, I think, and then John Poston -- oh, Hans, yes.

DR. BEHLING: Yeah, I just want to add something to your concern, and I think John -- I may have been the person who -- who sort of made him aware of the issue of subjective judgments that may have to be exercised. And I'll just give you an example so as to

demonstrate what types of concerns we have and the -- the areas where subjective judgment may come into play.

For instance, in a couple of the procedures where people have not been monitored and coworker data has to be applied to them, oftentimes -- and I can identify several procedures, including TBDs, that identify this particular protocol -- the person's really asked to make a judgment call with regard to how to assign doses to an unmonitored workers and using coworker data, and there'll be three categories.

The first category may be the worker is really rarely, if ever, exposed or can be expected to have been exposed to radiation, therefore assign ambient doses to that particular worker in any given year.

The second case will be the person was probably or should have been intermittently monitored, and therefore use 50 percentile value of a coworker data model.

And the third one is of course a person who should have been consistently monitored, and let's assign a 95 percentile value of a

coworker dose model.
Now again, here we have a situation where you -- the -- the dose reconstructor has to look at a -- an unmonitored worker who may have been working at Paducah or someplace 30, 40, 50 years ago and, on the basis of questionable data, has to make a subjective decision should he have ever been monitored at all, because -- unless it's stated right there he -- the person was a clerical worker and clearly it's indi-- it's -- would be an indication that that person should not have been expected to be in an RCA area, but not always, as we saw in Ames where we saw secretaries who were next door to places where we were doing reductant work. But anyway, these are -- this is a perfect example of a judgment call. And I have to say, if a dose reconstructor is faced with that, I would really feel sorry for a person who says, on the basis of extremely limited data, there is no monitoring data and there may not even be any records because a person's deceased and he can't even tell you what type of work he was doing where that judgment call has to come into play.

DR. ZIEMER: Thank you.

MR. GRIFFON: Yeah, I -- just along the lines of -- of John's last point, I mean it -- in the -- in the proc-- and I brought this up in a workgroup call in the process of -- of digging through Y-12 and Rocky Flats work, and -- and I think these exist -- at least on the larger sites. NIOSH, ORAU, I'm not sure who develops these. They're sort of working guidelines for dose reconstructors, and that is basically a road map. And I -- I know it evolves and it's -- I think Liz Brackett* mentioned in the last workgroup call that it's very much a -- that you have frequent meetings with your teams and they're constantly revising the -- you know, these based on revised TBDs, et cetera. But it does provide a nice road map and I think those -- a lot -- it -- it really allowed me to understand, you know, just how are they using all these TBDs when they're doing a Rocky dose recon-- you know, a Rocky Flats dose reconstruction. It -- it -- it basically guide-- guides you along, whe-- when to use which procedure and what -- and -- and to some extent what assumptions are used in what kind

of cases and -- so there was some kind of clarifying -- what I -- what I noted on the phone call, on the workgroup call, was that these are not procedures, so we haven't really looked at these. And I -- I wonder why they're not procedures, too. I -- I think that they -- that would be useful to -- and it would -- I think it would expedite our understanding, not -- not only of the procedures review, but also the dose reconstruction reviews when we do the cases.

MS. BEHLING: Yes -- excuse me, as a matter of fact, I believe that I did ask if they had those guidelines -- the only one that I believe that is published on the O drive is the Rocky 'cause -- and that's only been re-- recently published, but I -- I've asked for that a long time ago and I know --

MR. GRIFFON: I don't know how --

MS. BEHLING: -- they were a little bit reluctant --

MR. GRIFFON: -- how many they exist, but --

MS. BEHLING: -- because they -- they weren't official documents that were available, but that's the only one that's published.

DR. ZIEMER: John -- John Poston.
DR. POSTON: John, I'm -- when I get back to my office I'll take great interest in reading your report 'cause I have some heartache with some of the things you said, but we'll wait on that. I did want to ask, though, it was my understanding that when a person does a -- a dose reconstruction, that it's peer-reviewed by another person. Is that correct?
DR. BEHLING: Yes.
DR. POSTON: So doesn't -- isn't that partially where the consistency comes in? I understand that if the -- if the -- there are things that are done incorrectly, or perhaps there's a better way, that the peer review often sends them back to the person to redo them, so doesn't that result in some sort of consistency in the -- in the way people approach the problems?
DR. ZIEMER: Kate?
MS. KIMPAN: Yes. Yes, it does. Absolutely. There's a peer review done in our shop for every dose reconstruction, and we're endeavoring as we've gone through this to make certain we're capturing the expertise among our

team. So we not only conduct peer reviews, we do them thoughtfully with people that have been doing facilities, know a great deal about them. That's just in our shop.

Then we provide our advisory results to NIOSH and it's taken through an additional process and formal review on their part to assure not only consistency with what they've seen from us before, but also accuracy and correctness. And that of course is all before the Department of Labor process, which has another health physicist review, et cetera, for adjudication purposes.

DR. POSTON: Thank you. Secondly, maybe we can talk about this off line because those of us that have been doing dosimetry for a hundred years already know it's impossible to measure skin dose. No badge measures skin dose. It's an extrapolation using an algorithm. So I -- I would like to talk to you more about your comments because you're talking about something that's an impossibility. It's an estimate based on an extrapolation, and so I think your comment is a little bit off-base here.

DR. MAURO: I didn't explain myself well. The

main concern was that the reconstruction of the skin dose, the methodologies that are being employed, are valid when you get a positive reading on the open window film badge. The -- there are times when a person's exposure -- you don't have that part of the body monitored and therefore you would miss that, and that point needed to be made in the procedure. That was -- that was the (unintelligible).

DR. POSTON: Well, that's a valid criticism that could be made any time anybody wears a badge. Do you have a suggestion to improve or is it just a criticism?

DR. MAURO: It has to be -- the -- it was only a criticism to be -- that pointed out as a -- it wasn't -- that was the point that was made in the review. In regard to other radia-- you know, penetrating radiation it's less of a problem.

DR. ZIEMER: Let's see -- did somebody else -- okay, Dr. Lockey.

DR. LOCKEY: In relationship to the consistency -- inconsistency issue, how critical is that in relationship to your outcome? Is there any way to measure that?

DR. MAURO: Well, to date -- in fact, Hans and Kathy probably -- answer's better, but to date the -- we have seen in our audits inconsistencies where different approaches were taken to address how to characterize uncertainty, and I'm sure Hans could -- we have a long list of places where we've seen these -- the -- that -- these types of inconsistencies occur. However, as Hans would point out, to date I don't think any of them have had a -- had a significant impact.

DR. LOCKEY: That was my question. I mean --

DR. MAURO: That was the point, yes.

DR. LOCKEY: -- my point is, if you have inconsistencies but the outcomes are not going to be significantly changed by it, then it's not as critical issue as it might have been otherwise.

DR. MAURO: However, we are now entering into the realistic models and that's very (unintelligible) -- see --

MR. GRIFFON: Realistic cases. Realistic cases.

DR. MAURO: -- realistic -- see, what happens, we've been looking primarily at these min/max

cases, and -- and some approaches use -- that is a little bit incon-- is an inconsistency or not a correct interpretation, let's say, of one of the procedures, the error that's introduced really has no significance because -- essentially overestimate or underestimate. But now we've actually -- in fact you'll see in the next set -- fourth set of cases that just came through, there are two realistic cases there and -- and I'm sure Kathy and Hans can show -- here's a place where consistency and strict adherence to procedures becomes very important.

DR. LOCKEY: What do you mean?

DR. MAURO: You have a 47 percent, let's say, probability of causation that's been done realistically. There's when the rubber meets the road and becomes very important that the procedures are followed, procedures are valid and they're implemented in a consistent way.

DR. BEHLING: And just to -- to acknowledge to Dr. Lockey, you're exactly right. Consistency's a relative term, and -- and as was just discussed, I probably would not have gotten up to the mike had I listened to the -- the dialogue here, but consistency's relative

in the sense where I would, for instance, say a more temperate approach would be considered for a maximized dose where a more lenient assessment or interpretation is appropriate. Because by definition we're saying you may maximize, in the case that I just talked about where an unmonitored worker -- if this is a maximized dose, because it's a prostate cancer and the dose is not likely to even approach the 50 percentile value, it would be very appropriate to give a generous assessment on the part of the dose reconstructor to say well, we don't know for sure where you fit, but we'll give you the 95th percentile value of a coworker model because it's -- it's certainly going to be a -- a claimant-favorable assumption here that will allow you to say well, if you don't make it 50 percent, you're certainly not going to make it at the 50th percentile value and certainly not on the ambient. So consistency is a relative term, and it's depending on the type of dose reconstruction that's taken place, and I think you covered it very well by saying that you do treat the issue of uncertainty very differently

depending on which type of dose reconstruction we're talking about.

DR. ZIEMER: Okay. Dr. Lockey, that answered your question?

DR. LOCKEY: Yes.

DR. ZIEMER: Any others on this? Again, there will be a matrix developed from this. We -- this requires no action today, but it gives you a -- kind of a preview of -- of the document that you either have received or are about to receive, so thank you for that update.

SC&A CONTRACT TASKS, DR. LEWIS WADE, DFO

DR. WADE: Let me yet do one quick piece of business.

DR. ZIEMER: Okay, another quick piece of business before lunch, at least. We'll pass a document around from Dr. Wade.

DR. WADE: While you're all here, and I know after lunch we might lose some of you, I would just -- what I -- what I come to you is seeking the Board's okay for me to have SC&A prepare a cost proposal for next year. We have two more opportunities. We have an August call and we have a September meeting. In order to come to either or both of those with a cost proposal, I

need to go and ask SC&A to prepare a cost proposal. And again, the procedure we follow here is I wouldn't do that without consulting with you.

Normally the workload for SC&A has been six site profiles per year. On their original Task II there was no action. That was the tracking system that was developed. Procedures review, you just heard the report on some new procedures. Again there -- there are always new procedures. I would expect we would ask them to review such procedures. You know, our goal has been 60 individual DRs a year, and the target we've set is six site pro-- excuse me, six SEC petition evaluation reviews. I don't know that those will be the numbers that we'll want to fund SC&A at next year, but I need to ask them for a cost proposal that we can have that will have elemental costs in it, and then at our September meeting we can decide exactly what the -- the workload should be. But I do need your permission to ask them for a cost proposal.

DR. ZIEMER: So basically this serves as a starting point for next year's budget for the

contractor, and what would occur -- if the Board is agreeable to this -- is that Lew would seek from the contractor the cost proposals based on this level of effort. If later on it appeared that the level of effort had to change, one way or the other, those adjustments would be made.

A comment, Dr. Mauro?

DR. MAURO: Yes, to -- to help out a bit what we went ahead and prepared was a list of the procedures that we haven't reviewed to date, so I'd like to (off microphone) (unintelligible).

DR. ZIEMER: Sure, you're -- this is for basically Task III --

DR. MAURO: (Off microphone) (Unintelligible) Task III --

DR. ZIEMER: -- items.

DR. MAURO: -- and also a list of the site profiles (unintelligible).

DR. ZIEMER: Which is Task I. And Board members, I'd like to open this for discussion. Do you -- do you agree that we should -- and basically, this is a level of effort which looks pretty identical to this year's --

DR. WADE: I'm just starting at the

(unintelligible) --

DR. ZIEMER: -- so if you --

DR. WADE: -- it could be ratcheted up --

DR. ZIEMER: -- want to change this one direction or the other, just make that suggestion. Or if you're comfortable with this as a starting point, we will proceed. Comments? Roy DeHart and then Jim Melius.

DR. DEHART: Common sense says we have to prepare a budget, and to do that we need some kind of expectation of -- the expectation of doing the level of effort similar to this past year, with our current knowledge of where we are and where we're going, makes -- makes every sense, particularly when we can still be flexible with it.

DR. WADE: Thank you.

DR. ZIEMER: Okay. Thank you. Dr. Melius, did you --

DR. MELIUS: Yeah, I -- I think for -- I'm not sure whether -- to what extent it makes a difference in terms of the planning as Lew laid it out, though. Though I would think in two areas that I think we're going to ratchet up next year, consider that anyway. One is in

terms of individual dose reconstructions. NIOSH has gotten more productive. I suspect that SC&A's gotten more efficient in -- in doing them, and I -- it may be better for planning purposes and estimation purposes on the part of SC&A to -- to -- at least for the individual dose reconstructions, to -- to be a little bit more realistic in terms of where we expect them to be. And I would like to ratchet them up at least to 80 per year and maybe even consider up to 100.

For the SEC petition evaluations, which is much harder to estimate, I'm not sure it makes a difference in terms of estimations, given how much variety there is. But -- but I think certainly, given what we went over this morning in terms of what's in the pipeline, we're going to have to -- a number of them that are potentially going to need to be evaluated -- certainly going to be more than six next year, I -- at least that are potential. Again, we not necessarily assign them all to SC-- SC&A for review, but -- but I suspect that it'll end up being more than six that will require some level of review. And again, whether that makes

a difference at this point in time, but certainly we ought to be -- try to be realistic at the point where we actually do the tasks and -- and so forth. But I think for the individual dose reconstructions it may, in terms of their personnel, in terms of how they do it and -- hopefully it's more efficient, but I -- I think we should be talking about gearing up. It's just that NIOSH has been productive. There are a lot more need to be done and that our original goal was what, two percent, two and a half percent --

DR. ZIEMER: That's correct.

DR. MELIUS: -- and I think we need to start climbing towards that goal if we can.

DR. ZIEMER: Okay. We'll hear some other reaction if we can from other Board members. I'd -- would point out that this is not simply a cost issue. If we increase, for example, the number of DRs and -- reviews and SEC petition reviews, that has personnel impact or sort of capability impact on the contractor. They certainly would want to know that early on if that's the expectation, it's -- if they have to do any ratcheting up, so we -- we do want to

try to be realistic. If -- if we fully expect it to go to 80 or 100 next year in DRs, we need to know that early on. Roy.

DR. DEHART: Jim, you weren't here, I don't think, on the morning when the subcommittee met, but we did discuss a level of six in -- 60 over the year, 30 per -- per quarter, basically -- or 20 per quarter, similar to what we did last year. The dose reconstruction to -- if we increase, that also increases our workload, because we have to get together and -- maybe you all have more time than I do.

DR. MELIUS: Maybe we're more efficient, too.

DR. ZIEMER: Okay, other comments? Wanda Munn.

MS. MUNN: I continue to have great concern over our -- our limitations in terms of personnel, here on the Board and in NIOSH and our contractor, as well. If we were starting with a clean slate, I would consider the possibility of adding something to this to being reasonable, but we still have all these issues we've been discussing yet in this meeting hanging over our heads, and I -- it doesn't seem wise to add too much to this. This appears to be a good starting point.

DR. ZIEMER: Okay, Mark Griffon --
MS. MUNN: We -- are we not flexible -- flexible enough to be --
DR. ZIEMER: Okay.
MS. MUNN: -- able to add something to it as we go along --
DR. WADE: We could be.
MS. MUNN: -- if that appears to be necessary?
DR. ZIEMER: Okay. Thank you. Mark?
MR. GRIFFON: Yeah, I -- I -- just to speak to the efficiency of the Board, I think we've gained some efficiency, but you know, it -- having been involved in the first set of 20, second and third set of 20 reviews, I think if -- I -- I'm speaking in support of ratcheting up, I think we have to ratchet up the number of cases, and I think also as we do more and more randomly-selected, we're going to find a pattern of -- of some similar findings and I think we'll end up pre-- much more efficient in the resolution process, I believe.
Now, you know, the best estimate cases are going to be maybe more time-consuming, but I think we'll -- we'll at least have some -- we have a history here of -- of -- of certain

patterns of findings that we're seeing, and -- and I don't think that the resolution process -- and I don't think it took as long in -- in the second set and third set, even though we haven't produced final reports, we were able to work through issues much more efficiently. So I think we really need to ratchet up the number of cases. I don't think -- I -- I do think we should try to meet that target of two and a half percent, and to do so I don't think we want to be at this for ten years or so, you know.

DR. ZIEMER: Thank you. Other comments? Dr. Melius.

DR. MELIUS: The other -- I got that standing up. You've already called on me, but --

DR. ZIEMER: I saw you move.

DR. MELIUS: Yeah, yeah. The -- yeah, if we moved up to 80, I think that should -- some of that should be taken care of by efficiency (unintelligible) saying all of it. The other thing I think we should think about as we get into next year is, given what we've learned so far from it -- you know, doing these reviews -- do we want to think about a more efficient

method for doing it. Are there things that are time-consuming but not necessarily very useful, given -- given the way, you know, the -- the process has evolved and -- and so forth. And it may be certainly possible to become -- develop a more efficient procedure. There may be certain types of things that can -- can be dropped or we can be more selective in terms of how -- how we do that. And in order to get the two and a half percent, that may be what we'll -- may be another way of looking at it. I think we should gain enough experience so that we feel comfortable making those changes. The other hand, you know, may be that we -- we aren't more efficient, and -- or there aren't -- aren't changes we want to make, but we really should make -- plan for some sort of review of that and discussion. We set those procedures up a number of years ago and it may be time to revisit them, also, and see how we can make that whole process work better for SCA, for the Board, for -- you know, the people in the program in terms of fulfilling our task.

DR. ZIEMER: Thank you. Larry.

MR. ELLIOTT: Just a couple of thoughts from

the program status report that I gave at the start of the meeting. We talked about where we would -- where I anticipated the production to be at -- in September of '07. I told you that the ORAU contract comes to close at that point in time. We hope to be at steady state. We talked about how many -- given the case population at that time, two and a half percent would represent I think 625 to 650 cases to be reviewed.

So the two thoughts I want to impart here is that we've done a lot of dose reconstructions, and over the course of that production time frame, you know, we have made changes in how we go about doing them, and you have had a snapshot of 60 reviews -- now close to -- soon be 80. But you're seeing increments of time from those reviews, and you're seeing some of the changes that -- that we have made. I think that's important for you to understand.

We certainly welcome constructive criticism and review, and we take action on that. You'll hear that when I -- my presentation here at the end of the day. But that -- that leads to, I think, eras or strata here you need to examine.

So that's one thought.

The other thought is, when you sat and first developed your review process, you talked about blind dose reconstructions, and I would just encourage you to re-examine that as an opportunity to maybe get at some of the subjective judgments, the professional judgments that go into these things, especially looking at blind dose reconstructions on best estimates. If there's a better way to do it, I'd -- you know, I'm all welcome to hearing about that, so...

DR. ZIEMER: Right. Thank you. Hans, did you have a comment?

DR. BEHLING: Yeah, as a follow-up to Dr. Melius's comment, I think there's -- this may be an approach if there's an attempt to increase the number of cases that we will audit. We may have to modify our audit approach, and I think initially our attempt was to reproduce each and every single number that is entered into the IREP sheet, and that's a very tedious process. And of course that was done for at least two purposes. One, to -- to show that the numbers that were developed were

either correct, or perhaps maybe not correct. But it was really one -- had a secondary purpose, and I think we explained that in our write-up, and that is to demonstrate to the Board that we understand the process itself. And that was to gain your trust, in essence. Perhaps by this time you may have already gotten to the point that you've come to some conclusion about SC&A and say these guys are not all that dumb. I think we can trust them. And so we could potentially simplify the process by not having to demonstrate each and every number by reproducing it. And of course that has become much more complex anyway because of the introduction of Crystal Ball calculations where the -- which are statistical models, where even if we were to rerun it each and every time, we wouldn't end up with the identical number anyway. But really, simply put, if we have your trust at this point in -- in you having in us a certain level of understanding that we do know what's going on, that we are familiar with the procedures that are being used and -- and we can potentially simplify the whole process by which we bless a

dose reconstruction report and saying we have looked at everything. You may have to take a leap of faith and say we trust you in saying so, and -- and we don't see anything really wrong here, and simplify the process. If that's okay it would certainly reduce the number of hours that we have to invest in demonstrating each and every number as being correct.

DR. ZIEMER: Yeah, in fact, I -- I don't think the Board every mandated actually that every number be looked at. In fact, in the -- in the -- sort of the spirit of an audit, one could argue that you pick numbers, just as we pick cases, and you know, you do check some of them and see if there's discrepancies. But I -- I personally see no reason why we would insist that every number be checked in a particular case. Others may --

MR. GRIFFON: (Off microphone) No, (unintelligible) --

DR. MAURO: I -- I had an idea regarding the number of cases. In theory, we -- we know doing it the way we do it now approximately how many work hours it costs and so we -- but as

Hans pointed out, if we come at it from a different perspective and a different work product, what we can do in our proposal is -- my guess is would say well, here's an alternative. We could do twice as many for the same price if we simply constrain --

DR. ZIEMER: Uh-huh.

DR. MAURO: -- our review and lay out --

DR. ZIEMER: In certain ways.

DR. MAURO: In certain ways, and double the output --

DR. ZIEMER: Yeah.

DR. MAURO: -- at the same price. It wouldn't -- and I think that -- we could actually present that in our proposal as options.

DR. ZIEMER: Sure.

DR. MAURO: And then you could discuss the options as you see fit and --

DR. ZIEMER: Okay, a good suggestion. The other part of it of course is the issue that was raised in terms of the Board load. I would offer that, at least in my -- my case, I didn't find the number of cases prohibitively burdensome this past year. It seems to me we could -- it seems to me we could go to 80 if --

if needed, without that much -- I mean one additional set, but -- okay. Mark, comment?

MR. GRIFFON: Yeah, I -- I still think we can bump up the cases, but I -- just to speak to John's point, I -- I don't want to, on the fly here at a Board meeting, compromise the product that we're getting from these dose reconstruction reviews. I -- you know, I'm concerned about cutting the effort in half. I -- myself, I wonder if we still have -- especially the best estimate cases where we have to do more of this drill-down effort that we described in our initial RFP. I don't think there's been a lot of drill-downs. In fact, in the early ones that we did, it took us a while to even have the workbooks looked at, so we weren't even looking at workbook deals, so I -- I -- I wonder if we're -- you know, I don't want to compromise those important task items that we laid out without giving it further -- further consideration 'cause I -- I think that -- that we would miss some of what we intended on the -- on the review. And -- and -- I guess that's the main point.

DR. ZIEMER: Yeah, and I don't think we're

being asked today to make such a decision. Basically John is saying they might offer some optional approaches, and we'd have to see what those looked like at our next meeting.

I wonder if the group would be willing to go up to 80 on the dose reconstructions. I'd like to kind of get some level of consensus here. Wanda?

MS. MUNN: Sure, I wouldn't have any concern with 80. And as you've pointed out, Dr. Ziemer, this is not for -- for the Board, this is the smallest of the -- of the time-consuming tasks that we have to address. That's a relatively minor thing, and I certainly appreciate the point that Mark is making with respect to not wishing to water down what we're getting to the point where it is not the level of sophistication that we want to see. But the issue that John Mauro raises with respect to perhaps not doing that kind of drill-down effort with every one of the cases is -- is, I think, well taken and probably there's -- there is enough leeway in between the two points of view that we can do that.

DR. ZIEMER: Well, and certainly you can still

do the drill-down without checking every entry. Let's see, who else --

DR. MELIUS: I actually had mine up, but you stole my point, Dr. --

DR. ZIEMER: Oh, I'm happy to do that.

DR. MELIUS: You Hoosiers do it all the time.

DR. WADE: So I think I know how to proceed.

DR. ZIEMER: Okay. At least we have kind of consensus, I think, to -- I don't hear any strong objections to going up to 80. I'm not sure where we are on the -- was it site profile reviews or SEC --

DR. WADE: SEC --

DR. MELIUS: SEC --

DR. ZIEMER: -- SEC petition reviews. Do you want to give a little flexibility -- couple more on that?

DR. MELIUS: Again, for purposes -- as I understood it, for purposes of cost, that probably doesn't matter what number we put there.

DR. WADE: We'll get it fully -- we'll get --

DR. MELIUS: In terms of planning, I think it's clear that that's probably going to be a greater number than six next year.

DR. ZIEMER: Well, and this is the one that we have less control on what comes in the door in terms -- it's not quite like the dose reconstructions where we have a pool to choose from.

DR. WADE: And don't forget that Congress, in its wisdom, will decide how much money we have, which will decide much of this. But --

DR. ZIEMER: Okay.

DR. WADE: -- I just need to get started with the proposal and I guess I'll take this piece of paper with the number of 80, and I'll go forward with it.

DR. ZIEMER: Yeah. Thank you very much. We are at the lunch break time, actually a little over, so let's recess for an hour and get some lunch and we'll reconvene.

(Whereupon, a recess was taken from 12:20 p.m. to 1:35 p.m.)

STATEMENTS FROM CONGRESS, MR. JASON BROEHM, CDC

DR. ZIEMER: We are ready to reconvene the meeting. We actually have two transmittals from members of Congress that we want to enter into the record, and I believe Jason is going to come and read those, first on behalf of

Brian Higgins, a member of Congress, and then on behalf of Senator Cantwell of Washington state.

MR. BROEHM: Okay. Well, first I have the statement, as you noted, from Representative Brian Higgins of New York, and it reads (Reading) I want to thank the Advisory Board on Radiation and Worker Health for allowing me to make this statement today.

I wanted to take the opportunity of your meeting in Washington, D.C. to appeal to the Advisory Board to recommend that the former workers at the Bethlehem Steel site in Lackawanna, New York be designated a Special Exposure Cohort.

As this Board is well aware, significant controversy exists with respect to the dose reconstruction efforts at the Bethlehem Steel site. NIOSH undertook an extensive effort on dose reconstruction, but I and my colleagues in the western New York Congressional delegation have gone on record as to the shortcomings of that study, a litany I will not take your time with today. Subsequently the Board hired an independent private consultant to perform its

own analysis, and the results were vastly different from the NIOSH study. Perhaps this is not surprising given the difficulty incumbent in reconstructing radiation exposure that occurred over 50 years ago.

Meanwhile, during all of this debate, study and re-study, the former ill-stricken Bethlehem Steel employees and their families have waited patiently. They've waited for justice but all they have received are statistics and studies. These workers are not statistics. They are the men and women who, by their efforts, helped America win the Cold War. Now as a result of their work they are sick. They deserve to have their sacrifice honored and recognized, not minimized and trivialized.

We must concede that given the dearth of reliable information we have on working conditions at Bethlehem Steel over 50 years go, despite NIOSH's great efforts, any dose reconstruction is doomed to inadequately provide justice to these workers. The only just alternative available to us under the Energy Employees Occupational Illness Compensation Program Act is to make these

workers a Special Exposure Cohort. My colleagues and I have introduced legislation to make this designation, but it is stuck in committee. We have appealed to the President to declare a special cohort administratively, but he has demurred.

It is now up to this Board and the Department of Labor to do the right -- to do right by these workers and to recommend a Special Exposure Cohort. You are the last best hope that these workers will see justice. I implore you to act quickly.

Again, thank you for allowing me to address the Board today. I look forward to working with you to ensure that these workers and their families receive the compensation they are entitled to under the law, and the medical care they deserve.

And next I have a statement from U.S. Senator Maria Cantwell from Washington State.

(Reading) Thank you for the opportunity to submit testimony to the Advisory Board on Radiation and Worker Health with regard to the Hanford nuclear facility in Richland, Washington. Since Upton Sinclair exposed the

atrocious labor conditions in the meatpacking industry in his book, "The Jungle," over 100 years ago, the United States has made genuine progress in protecting workers from unsafe occupational conditions. We have strengthened labor laws to control hours and pace of work, and ensure adequate compensation benefits for workers. Especially with regard to employee radiation hazards, regulations exist to protect workers by limiting permissible exposures to hazardous chemicals and ionizing radiation. I recognize the hard work and tremendous sacrifice nuclear weapons and atomic energy workers have made for our nation's defense and security. I am proud to have worked to change to the Energy Employees Occupational Illness Compensation Program Act (EEOICPA), enacting Part E of the program now administered under the Department of Labor. Under EEOICPA the Board must review the scientific validity and quality of the National Institute for Occupational Safety and Health's (NIOSH) dose reconstructions. Among other responsibilities, the Boar reviews NIOSH's evaluation for petitions for Special Exposure Cohort status

and recommends whether such status should be granted. I want to thank Chairman Ziemer and members of the Board for your leadership. You determine the relationship between exposure and its health effects, using only the best available scientific evidence and in doing so, ensures the integrity of the program.

The Board was very responsive to my requests that the Hanford review process move forward, and I look forward to working with the Board to resolve worker compensation issues at Hanford.

As you are aware, the Sanford Cohen & Associates independent review of the NIOSH site profile of the Hanford nuclear facility was released a year ago. Based on the June 10, 2005 report I have raised concerns that the dosimetry data available for certain Hanford workers is insufficient to make an appropriate determination for workers compensation under the EEOICPA program. Sufficient information to perform dose reconstruction is essential to determining workers' Special Exposure Cohort eligibility. SC&A's findings suggest several instances where thousands of workers should be included into the SEC category. I will

continue to request that the Board recognize that certain Hanford workers qualify for a Special Exposure Cohort designation.

The Hanford plant located in southeastern Washington State was established in the early 1940s. At that time the plant was built for the manufacture, chemical separation and purification of plutonium. Annual records of radiation exposure have been obtained from dosimeters worn by employees. These data reflect estimates of exposure to several types of ionizing radiation. Moreover, there have been numerous studies on populations' occupational exposure to radiation at the Hanford site, including Gilbert and Marks (1979); Trolley (sic) et al (1983); Mancuso, Stewart and Kneale (1977); Kneale, Mancuso and Stewart (1981 and 1984); Hutchinson et al (1979); and Darby and Reissland (1981). There is no doubt that the Hanford plant has employed many people, especially before 1972, in work involving some exposure to radiation.

The concerns raised by former and current nuclear workers about the data used to determine eligibility for compensation are not

unique to my constituents at the Hanford site in Richland, Washington. Without a doubt, dose reconstruction is a complex process that involves rebuilding a worker's history of radiation based on individual dose records as well as other site documentation. To receive workers compensation for an occupational illness, a worker must prove that the specific condition was cause by a particular job exposure.

When an illness has a long latency period, workers may be unable to remember what substances, hazardous or not, they were exposed to twenty-odd years earlier. Frequent changes in work or work practices complicate the matter further. Without a complete work history and knowledge of specific occupational hazards, it will be difficult to correlate symptoms and causes. In other words, the burden of proof is on the claimant, and the outcome depends on how much certainty is required. That said, questions about the Hanford radiation dosimetry data, based on the SC&A review, lend support to a Special Exposure Cohort status for these workers.

According to SC&A review of the Hanford site profile, neutron exposure among many Hanford workers contributed a large portion of the total dose from external radiation. For example, neutron exposure dominated for 100, 200 and 300 area workers at Hanford. However, findings from the SC&A report claim that neutron exposure to reactor workers are not adequately characterized as a result of unmonitored exposure to neutron sources in operations such as separations, HLW tanks and burial sites, and R&D facilities, among other issues. As such, there is a high potential for worker exposure to neutrons due to the historic design and operation of reactors.

Additionally, not all reactor operations personnel were monitored for neutrons, and a number of non-reactor facilities with potential for neutron exposure that were not addressed in the Technical Basis Document.

While there were other findings from the SC&A review of the Hanford site profile, I understand the Advisory Board has formed a working group to facilitate further discussion of these findings between SC&A and Oak Ridge

Associated Universities, the contracting agency which authored the Hanford site profile. I respectfully request members of the Hanford working group to brief my staff on the status of these discussions.

In conclusion, I want to take this time to revisit a major goal of EEOICPA, to provide timely -- quote, timely, uniform and adequate, unquote, compensation to these workers. The role of the Advisory Board is to provide quality control and raise public confidence in the fairness of the claims process. While I recognize that determining the eligibility of worker compensation is a difficult task, time is of the essence. I have met with far too many sick Hanford workers who need medical help and, more importantly, deserve compensation. The SEC designation was created expressly for situations in which data needed for the dose reconstruction process fails to exist. The independent review of the NIOSH site profile of the Hanford nuclear facility suggest several instances where thousands of workers should be included into the SEC category due to -- due to the lack of such data. Because of this, I

reiterate my request that the Board give particular consideration that certain Hanford workers qualify for a Special Exposure Cohort designation.

Again, I thank the Board for allowing me to submit testimony to the Board and I look forward to continuing -- to continue working with the Board to resolve worker compensation issues at Hanford.

DR. ZIEMER: Thank you very much for reading those letters into the record for us, Jason.

NIOSH UPDATE OF PROGRAM ISSUES: BETHLEHEM STEEL SITE PROFILE; CONSTRUCTION WORKERS; SITE PROFILE REVISION ACTIVITIES; QA/QC; COMMUNICATIONS INITIATIVE
MR. LARRY ELLIOTT, NIOSH

We'll now return to our regular agenda. The next item before us this afternoon is the NIOSH update of program issues, and Larry Elliott is going to make that presentation. Larry.

MR. ELLIOTT: Thank you, Dr. Ziemer. Good afternoon again, ladies and gentlemen of the Board and interested members of the public. I appreciate this opportunity to provide you at this point in your meeting an update on several program-related issues that we have been tracking.

We'll start off first with the Bethlehem Steel

site profile revision. I believe it was in the -- your Oak Ridge -- maybe the Knoxville meeting where we had -- you had considerable discussion and deliberation upon this site profile and come to some closure on it, identifying six issues that you asked us to follow up on and report to the Board on a quarterly basis, I believe were the words that were captured from your deliberations. And so we'll talk about that for a moment here.

We have completed five of the -- and resolved five of the six issues, and let me just remind you quickly what those are. The model that we had for the Bethlehem Steel site proposed -- or used 1951 and 1952 exposures and they were felt to not be totally appropriate. We modified -- we have modified the site profile, 1951 and 1952 are treated separately in the site profile now, and we've incorporated an adjustment factor for the 1951 air samples, and we are using the highest data point for the 1952 time frame.

Ingestion was the second issue, and the concern was raised that it is not adequately characterized in that site profile that we were

using at the time. It has been modified to incorporate ingestion intakes based upon air concentration, surface contamination and surface-to-ingestion transfer factors. Resuspension of dust that was accounted for in that site profile was (unintelligible) questioned, and we have incorporated guidelines using the median value for 1949 to 1950, and separately for 1951 and 1952.

There was an issue raised by workers with regard to the extended contact with uranium and it -- it was not addressed in the first site profile, and we have modified that now. It assumes a 1.5 millirem per hour from clothing contamination and two weeks in between the washing of clothing, resulting in a 1.8 rem per year for clothing contamination.

And the fifth issue that was raised that we've addressed now in our revised site profile was an effect of oronasal breathing. The Board agreed with us, I believe, that the effect would have been small at Bethlehem Steel, and we are continuing to work on a generic guidance that will not only address that issue for the Bethlehem Steel claimants, but also across

other facilities, and we'll be providing that soon, I anticipate.

The remaining issue is -- centers on the 95th percentile of dose and a concern that it does not take into account the short-term, episodic exposures, those particularly that would occur during the cutting of cobbles when the uranium bars would have gotten balled up into the rolling machine. And so there was questions raised about that. We continue to work with Mr. Walker. We have I believe a meeting schedule with him and the workers that he's identified that have knowledge of this particular exposure scenario and will be visiting with him next week, I believe -- on the 21st, is that right, Mr. Walker?

MR. WALKER: That's correct.

MR. ELLIOTT: And we hope that, from that exchange with those workers and Mr. Walker, we'll have enough information that we can address this issue properly in the site profile.

Construction workers is another issue that was raised at your Board meeting in Denver during the public comment period. Unfortunately there

was a lot of inaccurate information disseminated in that public comment, and so we wanted to make sure that we provided you a update on where things stand with construction trades workers. I -- I commented on this at the end of the meeting in Denver, and this is an update from that set of comments.

So the number of cases that we have with job construction titles in their work history for all of the claims that we hold, those ran a little over 4,000. We have completed and submitted to the Department of Labor 2,646 cases of that 4,000 total, and of those there have been about 22.4 percent or 594 cases that were found to have a probability of causation of greater than 50 percent or have -- DOL will find them to be compensable based upon the dose reconstruction we have provided. Additionally there have been over 2,000 of 76.6 percent of those cases completed that were found to have a POC of less than 50 percent, or will be determined by DOL to be non-compensable.

We have yet to complete, 1,435 cases, and of those we have 705 that have been pended in our process until we come forward with this

Technical Informa-- or Technical Basis Document entitled "Parameters to Consider When Processing Cases for Construction Trade Workers," and what this Technical Basis Document applies to specifically are those subcontract workers who were not monitored under the primary contractor's monitoring program. In other words, they didn't have any monitoring done for them by the prime or the MEO contractor. And so this Technical Basis Document is in the very last stages, I assure you -- I know Dr. Neton was reviewing it this morning, and we're hopeful that it -- all the -- all the technical aspects and issues that we have identified with it are -- have -- have been put to bed and we will implement this very, very soon to attend to these 705 claims that deserve attention so -- so dramatically. We have 730 cases that are active and they -- they may be openly active, we're working on them, or they are pended for other reasons besides this particular Technical Basis Document. And those reasons -- there's a variety of reasons. They're very case-specific. We may -- in some cases they are

pended because they're waiting on a Special Exposure Cohort class eligibility determination. They may be new cases to us and we have -- we are awaiting requests for DOE monitoring information. There may be some technical issue other than that that we're -- we're awaiting resolution on. So we're -- we're busily looking at those 730 cases and trying to finish those up as well.

So I would -- I would offer that I don't believe, as I said in Denver, this is a disenfranchised group. No, we paid particular attention to the trades -- the construction trades and we're focusing due diligence and attention to their -- to the current claims situation.

Too quick on the trigger. I think after -- after this morning's discussion and the presentation from John Mauro of SC&A on -- and yest-- was it yesterday Kathy Behling got up and gave us a review of procedures -- this is a timely update from our perspective. I want to say to the Board and to the public that as we hear the constructive comments brought forward from the auditor's review, where we recognize

the importance and we can make a change, we do so. We don't feel it necessary to wait until we had Board consensus or Board action directing us to do so, so there are a number of changes that have been affected by those -- those review comments that we have received. There are 132 Technical Basis Documents that have been approved and are now in use. I don't believe that number's really come out. I hope it's the same number as those that John submitted to you in a -- in a listing this aft-- this morning that -- the two numbers, what they've reviewed and what they haven't reviewed yet, I hope they line up with that. There's also 43 Technical Information Bulletins that have been completed and are in use. And I wish I had a number here for you on how many more we need. That -- that is an unknown. That's something that -- that we're -- we're constantly asking our contractor and ourselves, how many more Technical Basis Documents, how many more Technical Information Bulletins are we going to have to craft. And this goes to the question that was raised this morning about the complexity of doing dose reconstruction

with all of these tools in our tool box.
So I want you to understand that Technical Basis Documents are -- that we know of are listed here for development, and they're at various stages of development. And in some cases, like in Pantex, you can go -- go onto our web site and you'll see that Pantex -- I think there are two portions of this -- two chapters of this six-chapter site profile that are approved. The other chapters are under development and we hope to be seeing those put to use very soon.
Of the 43 approved Technical Information Bulletins there are 21 that are site-specific. In other words, they deal with a specific technical issue associated with a process or operation at a given site. And another -- the remaining 22 -- there are 21 that are site-specific. The remaining 22 are complex-wide. In other words, they address an issue that deals with more than one site or one operation at -- across sites. So I think that's -- that's important to know out of that 43 -- it's important for a variety of reasons. It goes to the dose reconstruction review. It also goes

to conflict of interest and the policy that we're developing and attending to on -- on full attribution and making sure we have document owners that are not conflicted.

I think it needs to be made publicly -- the public needs to be made aware that site profiles and Technical Basis Documents are reviewed periodically. Besides what the auditor is doing for the Board, in-house we review them periodically. ORAU has their own periodic review schedule -- I think it's a biennial review schedule. And it's important also to understand at this point in time, as we're working on our -- developing the conflict of interest policy, that all of these documents are under a subject review for conflict of interest as we proceed with the implementation of the policy as we see it developing.

Currently there is a technical review on INEL site profile document, ORNL site profile document and the Fernald document. That's an internal set of reviews that are ongoing on those three documents.

We move on to an update now on where we stand with regard to communications and our

initiatives in that area. This image is from the -- on the right-hand side here is from the nav-- it's a navigation bar on our web site. If you haven't been on our web site, I encourage you to go there, take a look at it. I hope that this navigational tool will aid you in finding the information that you're seeking. There is a huge, huge amount of information on this web site and we've had good comments. We've had good -- good constructive criticism about the navigability of the web site, and so we've taken some steps to try to improve that, and we're constantly looking at this web site to try to develop better methods and better ways to present information and to aid people in finding that information.

The Advisory Board page on the web site now contains a -- listings of meetings for your -- for the current year, as well as a -- when you go to that page you'll see on the right-hand side another bar that you can click on that takes you to previous meetings, and so you can find the correspondence, you should be able to find all of your meeting minutes and transcripts.

There's an individual site page on the navigation bar, and if you go to an individual site page you will see the information that has been produced to date for a given site, whether it's the site profile, a Technical Basis Document that is used to address issues associated with dose reconstruction for that site profile, whether it is information about SC&A's review. There -- those documents should be presented there as well, so there's a lot of information organized by site that you might want to avail yourself of.

There's a list of work sites. The master list of specific work sites for which NIOSH has developed info is another way of presenting the site-related information, and so you might see some duplication of information if you go to these different web pages within the -- within this web site.

The Special Exposure Cohort web page is now separated into four distinct pages. There's an SEC main page which contains classes in the Special Exposure Cohort, the qualified -- it lists the presumptive cancers. It also shows the petitions that have qualified for

evaluation, petitions and classes that have not yet been added to the SEC but are under consideration. The additional pages on the -- on the SEC web page provide instruction on how to submit petitions. It provides a copy of the -- of the rule on SEC petition processing, and it provides some procedures on how we -- we do handle those petitions.

The technical documents used in dose reconstruction is another duplicate page within the web site which has some shortened information and provides links to the individual site pages. So there's a lot of cross-coordination here within the web site, and we hope that that will aid in finding specific information you're searching for.

If all of that fails you, I'd go to the search -- little search engine at the top and type in what you're looking for, and it'll take you to what you want to see.

We've revised -- we've been working on our acknowledgement letter which we send out to all claimants once we receive a referral from the Department of Labor informing the claimant that we now have their particular claim and we are

about to begin dose reconstruction. We have shared this information packet -- it's now a packet. It's more than just the letter. We shared this at one of your previous Board meetings. We didn't ask for -- we asked for individual comment. It was out on a table and we asked folks to stop by and comment on it. There's a number of information bulletins on the -- this site of the packet -- a glossary of terms, provides detailed steps in claims processing, a little yellow bulletin here that talks about dose reconstruction and what that means for the claimant. And there's a -- we always give a refrigerator magnet so that the person can have the contact information. So this will be put into use very soon, I hope, and we'll see some changes in how our -- our notification to our claimants is received by that. So we welcome what -- the inputs that some of the Board members gave us on that. At your last meeting in Denver many of you might have been aware that we were demonstrating a dose reconstruction video in focus group panel sessions where there was a room set aside and one of my health

communications specialists was pulling in claimants and -- and people who had an interest in viewing this video and providing us comment on it. It is an introduction to the topic of dose reconstruction. It is intended to provide a very general description and understanding of this complex scientific program. We're hoping it reaches a target audience here that will understand what we're saying in the video. It's -- it's really designed in that audience to reach the Energy employees and/or their survivors.

The video's currently within the Office of the Director at NIOSH and our communications -- associate director for communications is giving it a final review. And once we have that approval, it will be sent out for external review, which means every member of the Board will get a copy. Interested members of the public can get a copy. And we would welcome your individual comments on whether it meets the target that we're -- we're trying to achieve and it provides the communication messages that we hope it does. So I -- I would hope you'll see that within a -- in a month or

so. It'll be coming to you by mail.
I mentioned earlier -- and in Denver meeting and other meetings -- we are working on reformatting our dose reconstruction report. This is the report that we provide to claimants and we provide to the Department of Labor, we provide to the Department of Energy, that explains how we went about doing our work in reconstructing the dose for that claimant and what those findings are, what the estimates of dose are for that particular set of circumstances that the Energy employee worked under and what their -- we ant-- we estimate their exposure to have been. The draft language for that reformatted report has been developed. It is under internal review. We will be talking with -- with our ORAU counterparts next week about what it takes to retool the -- the development and distribution of such a report now. And it's our goal to see this report attend to some of the comments we've received about the technical -- technical aspects of what we do and the difficulty in understanding, from a lay person's perspective, what it is we do and what it means for them.

And so there are -- there are really two sections that this rep-- this new format will contain. One will be a very claimant-friendly section that uses non-technical language to summarize the report, to tell them how much dose we have accounted for in their dose reconstruction and how we went about doing that -- and that is a difficult, challenging task, as you might imagine.

And then there will be a technical section that will be very elaborate and very scientifically developed so that a -- if the person wants to get an expert opinion, wants to have another health physicist look at it, they'll understand. The auditor will understand what we've done in calculating and estimating the dose, what technical information we used to do that.

I'd like to talk a little bit now about our quality assurance and our quality control program. And there are going to be really three sections in this part of the presentation. The first section I'm going to talk about is where we receive the claim from the Department of Labor, and what we do with

that claim to make sure that all of the information that we have been given is the correct information, the information that we need in order to start processing the dose reconstruction. And then I'm going to walk you through the dose reconstruction quality assurance/quality control program that ORAU performs in developing the dose reconstruction. And then I'll finish up with our quality assurance aspect of reviewing all of that again to make sure that we've achieved the product that we want.

I think it's important for us in this part of the presentation to be very clear about what we mean by quality control/quality assurance. Quality control is a set of steps or part of a procedure that is performed during the development of a product to make sure that as we go along in that development we achieve a level of satisfaction according to our product specs.

Quality assurance is an examination or a test or a set of steps that are applied after the product has been developed and we're assuring that it does meet our product spec.

So what is our product spec? We've operated from day one under this premise: That our product specification in dose reconstruction was that each dose reconstruction is of sufficient quality to yield a correct decision by DOL on the compensability of the claim. There's a lot in that that's not said. We've talked about our efficiency processes. We've talked about best estimates. There's really -- if you get down to it, there's only three ways we really do dose reconstructions.

We do an underestimating approach where we don't account for all of the dose because it shows that the claim is compensable. We do an overestimating approach where we throw everything in it we can to make sure we've accounted for every dose that we can, we've been as claimant-favorable as we can to show that the exposure did not result in the cancer. And then we do a best estimate approach, which is the most difficult, the most time-consuming and the most resource-intensive approach to assure that for those cases where the probability of causation is calculated out to be between 45 and 52 percent that it is

correct, that we cannot find any more dose to make it above 50 percent and we've done our job the best we can.

So I think, given that, you're going to -- you've seen from the auditor's review that there are a number of deficiencies noted. Those number of deficiencies, as you heard this morning, have not really been of the order of magnitude that would have changed the compensability decision, perhaps. They've been noted, and we take note of those and we're making changes as we think appropriate at this time. But we recognize that our dose reconstruction efforts -- I'll just be frank here -- have some warts on them at times. They are imperfect. But they meet this product spec, we believe.

The quality control program for our claims processing -- we have a -- I'm going to hope I don't bore you with these procedures, but I'm going to list the procedures just in case -- in case the Board or SC&A wants to make note of have they reviewed these.

We have a claims processing procedure which my staff adheres to upon receipt of the claim.

There's certain things that they have to do on receipt of the data from the Department of Labor to make sure that that information is of sufficient quality and quantity for us to do our job in dose reconstruction. There are detailed quality control steps that are specified in this procedure to make sure that the data that's entered, by hand, into our electronic database is entered accurately and completely.

Such as: The cases are date-stamped and they are assigned a tracking number, as you know, and all documents are logged the day they are received. This is important to us because that's when we say we start our work on those cases. We're held accountable from that day on.

All data is entered into our electronic data system and there are electronic verifications of that data performed, such as -- there's an electronic mechanism that can test as to whether or not the Social Security number is right. You know, has it got -- is it missing a number, are there too many numbers, those are things we can do electronically.

All of the ethnicity data that we need to process a dose reconstruction for skin cancer is checked. Smoking histories for lung cancers are checked to make sure that we have that information and it is accurately recorded. The dates are verified for reasonableness, and we do this also by electronic mechanism to determine whether the date of birth, the date of death, the employee start and end date are accurately entered into the system.

The data is then compared, after it's entered, with the hard copy data that we receive. Now many of the Board members -- some of the newer ones may not have been into our processing area, but we do keep all of the hard copy on file. We work at our desks in electronic format from the database, but all hard copy that we have on a claim exists in our hands in our -- in our -- in Cincinnati. So we check the Energy employee and the survivor data and make sure that that is complete. All of the cancer information and the description, the ICD-9 codes are compatible and they're accurate, we go through that.

We determine if the right forms have been

submitted to us. That is the form that the Energy employee or the survivor has to fill out at DOL, and we check those for accuracy and clarity. Many of -- many forms that we get, many infor-- much of the information we get from the claimants are scanned by the claimant or they're a photocopy, and we want those to be legible so we check that, we check the legibility of those documents.

Any discrepancies that are noted are reported back to the Department of Labor, because it's their responsibility to provide a full development of the claim information. And any supplemental information that the Department of Labor provides to us is also QC'd in the same fashion and checked.

Once the dose reconstruction report has been produced by the -- by ORAU and given to us, and I'll talk about that -- that part of the process in a minute, but I'm going to jump ahead now and take you to where it's going to be filed. The dose reconstruction report has been finished and we've got -- we're awaiting OCAS-1 or we're going to get the OCAS-1, so we're looking at the report to make sure that

it is -- it is complete and accurate, the tracking number is on each page, we don't have -- interspersed somebody else's -- pages from someone else's report. We want to make sure that we're not -- that we want to give a complete accurate report and we're not divulging Privacy Act-related information to people who don't -- should not be getting that. All pages have to be accounted for within a report. There has to be OCAS health physicist approval signature on these reports as a final peer review of the product that we receive from any contractor or from -- if it's a report that has been developed in-house by one of the OCAS health physicists, there still has to be a OCAS health physicist approval. We also check the EE name and the Social Security number and make sure those are correct because those are Privacy Act-related information that we need to monitor very closely.

Once we receive the signed OCAS-1, we verify that the signatures on that OCAS-1 are in the case file and they are matched up. And if there are any modifications on that OCAS-1, then that triggers our legal folks to get

involved with us and go back to the claimant and explain that we cannot accept a modified OCAS-1; we have to accept only a signed OCAS-1. So there's a -- there's a quality control aspect there as well.

The return of the OCAS-1 form and the completion of the closeout interview is also monitored, and there's quality control steps in that process. As you know, we have a 60-day review for cases with unreturned forms. In other words, we've sent out the dose reconstruction report. We allow the claimant to take 60 days to make a decision on signing the OCAS-1 or providing us additional information. If they don't do that, we notify them that their 60 days has come to limit and we offer them another 14 days to remedy, either send us an OCAS-1 form or send us additional information. So at the end of 74 days, if we don't have that, then we administratively close the case. But all of that is trapped -- tracked by a phone log which is recorded into the case file -- many of you have seen those phone logs, on the Board -- and we -- the interview of closing out the dose

reconstruction is also captured. Those interviews and that -- that phone log capturing is also monitored and quality control-checked. If there's no notation in the phone log, then there's a -- that -- that a closeout interview was done or that the person was contacted about their missing OCAS-1, then that triggers another step in the process to back to that claimant and follow up with them.

The analysis record, which is the full set of documentation, all of the claim file that was submitted to us plus everything that we have added to it -- all of the information that we have collected and assembled, whether it's the DOE response, the AWE information that we've assembled, Technical Basis Document tools that might be referred to -- we make sure that they're accounted for in this analysis record. That is all assembled. It's put together on a compact disk and it's provided to the Department of Labor for a closeout of the case. And those -- those analysis records and that compact disk, as it's created, are examined and verified against the hard copy information that we have. We make sure that we're not -- we're

enclosing everything, we're not missing a piece of information that's vital for DOL to make their adjudication of the claim.

Now let's go into the ORAU quality assurance/quality control procedures that they employ in the development of dose reconstructions. And their description of their procedures are outlined in this quality assurance program plan, and it was approved back in January of 2003. And I think if you go in and look at that, it's been updated at least two or three times that I'm aware of. I'm just providing on these the origination dates. I'm not providing the update -- revision dates for you.

So internal quality assurance audits and assessments and surveillances are performed under this procedure. They are so done on project processes and -- and those are also performed in accordance with the conduct of quality assurance surveillances or quality assurance audits as prescribed by those procedures, and there's reporting mechanisms that are required under those particular procedures.

The principal components of the ORAU quality assurance/quality control processes for dose reconstructions are found in this ORAU Procedure 003 (sic), which was approved in November of '04. This talks about how the dose reconstructors are trained, what requirements they have to meet. Then the dose reconstructions themselves are performed in accordance with the guidance that's provided by the various Technical Basis Documents and the procedures and the Technical Information Bulletins that y'all are becoming familiar with through the review by the -- by SC&A.

There are resources such as the telephone interview with the claimants that are approved and validated, and I think that's some of the things that ORAU -- SC&A has already reviewed, and I think they have some others that they want to review in that regard on CATI interviews.

ORAU does an initial quality control review that is performed by non-health physicists to assure that a draft DR is ready to go to technical peer review. And in that review they're talking about somebody that looks at

the -- the language that's used, is the spelling correct, is the accuracy of the case information -- this is duplication of some of the stuff that my staff does, but as they develop the report, that's what they're looking for. They're also charged with looking at the consistency of the IREP input and the summary file information. So before it goes to technical peer review, they have staff who do these reviews on really an administrative preparation review, is what I would call it. So before we get it at NIOSH, every draft dose reconstruction then undergoes a technical peer review in conformance with the ORAU procedure that was listed here that was approved for use in December of '04.

An initial quality control review -- let's see -- oh, I'm behind a page.

The peer review is performed using a peer review checklist that was also approved in December of '04, and this checklist is designed to identify issues regarding the technical development of the dose reconstruction. That -- that checklist is then provided to the dose reconstructor and those issues must be

satisfied in agreement with the technical review -- the technical peer reviewer. Technical editing for grammar, reference checks, format and spelling is also completed at this stage.

And then there's a final quality control review -- similar to the initial quality control review that I talked about that's a non-health physicist -- who are again looking at is the language right, is the spelling right, is the grammar right, do we have all the detailed information pertinent to that particular claimant, is it all captured in the report. So it's another administrative review.

Now we go into -- they've produced the report. They've gone through their quality control steps, their quality assurance at the end, and now it comes to NIOSH for our -- for the last few steps in the process and our quality assurance that our product that we're going to deliver to the Department of Labor meets our spec, our product specification. This is all described in Dose Reconstruction Review Procedure 007, which is our procedure and that was approved also in December of '04.

This -- the principal components of this procedure involve an OCAS HP review of 100 percent of the dose reconstruction submitted. We do not have one dose reconstruction that is not reviewed by an OCAS technical peer reviewer. Every one of these is reviewed by an OCAS technical peer reviewer who is not conflicted for that given site.

When a draft dose reconstruction is returned for rework from DOL back to us, a form is generated and we have a form that we look at with regard to those reworks, and you can see this is some of the information I presented earlier in the week about how many we got, so that's where we -- we're evaluating those in that given time frame, and then seem to be consistent with previous years' experience for -- for this current year.

Did I skip one?

UNIDENTIFIED: You did.

MR. ELLIOTT: Happy trigger finger. Early in 2005 we decided to sample five percent of all dose reconstructions that were submitted, on a random basis, and do a dose reconstruction review again, using a similar checklist. That

checklist consists of 19 individual questions that we use to examine such things as are the work dates, the employment history, consistent; are the diagnosis and the dates with -- with any medical aspect consistent; are the doses that we -- that we reviewed and estimated, are they accurate and is there a summary matched to what we've been given from the dose of record by DOE, et cetera. So there's a variety of different things we look at in those 19 questions.

Those checklists are compiled on a quarterly basis, and they are shared with whichever contractor we're dealing with to determine if there's any trends that are -- are something that we want to look into deeper and -- and make any modifications or find any corrective action for.

A hundred percent of the dose reconstructions also undergo a final NIOSH technical review, and that is a brief review intended to identify errors in the general approach of the dose reconstruction, as well as any format errors that -- that might have crept into the particular dose reconstruction itself, report

errors.
NIOSH also performs and documents self-assessments. We have a team that performs this and they are done under a procedure entitled "Conduct of Assessments," 005, was also approved back in December of '04. And to date we have done 15 assessments. These assessments have a summary of findings. You've seen one, I believe, on the Paducah conflict of interest. They provide a corrective action plan.
Examples of other assessments, we've had an assessment of the analysis record, those -- those final, complete compact disks that have the summary of all the information we've assembled. We've looked at that.
We had an assessment on the ORAU dose reconstruction process itself. We've had an assessment on the dose reconstruction review record, the quality control steps in reviewing dose reconstructions. We've also had an assessment on the efficiency of the dose reconstruction process. And so those are just examples of some of these 15 that we have completed.
I think I covered that one.

Our Technical Basis Documents are developed in accordance with this Document Control Procedure 001 that was approved in February of '03, as well as the -- this als-- this ORAU Procedure 0031 which we approved back in October of '04. What these -- these get at are how a Technical Basis Document is developed, how it's formatted, what its content needs to look like, what it addresses. It has to have a purpose. It has to state what it's trying to accomplish. And so these procedures outline the process for the development of that particular set of documents.

There's also a review -- an examination of the process that -- that these documents undergo as they are drafted and as they are routed through full review. Each time a document is reviewed there's a set of review comments that are captured, and those review comments are then shared back with the document owner and they have to be addressed. And they have to be addressed to the satisfaction of the commenter and the decision authority, whether it's ORAU or NIOSH and OCAS, before they can be considered a final revised document.

So you know, after we go through that, after all of those internal comments have been assembled and shared, they -- these are the check-off points. These are the people who do provide those comments. There's OCAS health physicists. Our Office of General Counsel reviews each and every one of these. They provide comments. This is all captured in this document control resolution system. The Department of Labor's health physicist, Jeff Kotsch, is in the room. He knows what happens. His comments come back to us as well, and they are so documented. And the DOE -- DOL legal team also has an opportunity to opine and review on our Technical Basis Documents as well.

So once those comments are all captured, then we have to go through comment resolution. They're compiled in a -- in a clear document form and ORAU then considers those comments, makes appropriate changes as they deem necessary, returns those revised documents to us and we examine how they resolved and addressed those comments. They're shared back with the commenters for concurrence. And if

there's any issues at that point, then we go back through the same process again of comment resolution. So it's a -- it's a continuous loop.

Once we have achieved concurrence that the comments have been adequately and appropriately addressed, then it gets an ORAU approval for use that's shared with us, and then we put the final stamp of approval for implementation and use.

I think that's all I have to say at this point. I hope that gives you a little better insight into what our quality assurance/quality control efforts are. It's something we've not talked about in great detail in the past. I also hope that some of the other issues that I brought you up to speed on satisfy your interest. And if there are other things that you want to hear about, I'd certainly be happy to add them to the list.

DR. ZIEMER: Very good. Thank you very much, Larry, for a very thorough discussion of those issues.

A couple of questions. I'll start with a couple and maybe others will have some. Just

for clarification, on your dose reconstruction video that you talked about under communication initiatives, is this actually a video? Are we talking about CDs or what?

MR. ELLIOTT: It is a DVD, a video, and you can play it in your DVD player.

DR. ZIEMER: Are there any people still have those?

UNIDENTIFIED: It's a CD.

MR. ELLIOTT: It's a CD.

DR. ZIEMER: I'm actually serious.

UNIDENTIFIED: It's a CD.

DR. ZIEMER: It is a CD or a DVD?

MR. ELLIOTT: It's not a VCR.

UNIDENTIFIED: (Off microphone) It's not a (unintelligible).

DR. ZIEMER: Oh, okay. Okay.

MR. ELLIOTT: You're thinking of VCR, perhaps.

DR. ZIEMER: Okay, it's a DVD. Okay.

MR. ELLIOTT: It's a DVD.

DR. ZIEMER: Okay.

MR. ELLIOTT: And our intent is --

DR. ZIEMER: That's what I wanted to know.

MR. ELLIOTT: Yes, it's 12 minutes long right now. Our intent is to share it -- share it

with the -- we plan to put it in the Resource Centers. We plan to bring it to public meetings like this --

DR. ZIEMER: No, that's good, I --

MR. ELLIOTT: -- which is --

DR. ZIEMER: -- was just wondering how the -- what the word "video" meant in this case.

MR. ELLIOTT: Yeah, it is a video that's 12 minutes long. It is -- it's on a DVD format, some of -- some computers can play it, or you can play it in your DVD player in -- with your home TV.

DR. ZIEMER: On the communication initiatives, and I sort of referred to this before, what instruction do you give to the Department of Labor as to what the final outcome of the POC should look like? And I'm really getting at the significant figures in the number. Do you instruct Depart-- who determines that we're doing five and six --

MR. ELLIOTT: I share your concern on that. I've preached from day one that we can't find ourselves being a significant figures five points out from the decimal point. I think -- I think Dr. Neton has a ready response on why

we go to that significant (unintelligible) --
DR. ZIEMER: Well, actually the number's not really officially generated by you, is it?
DR. NETON: That's correct, we don't generate any probability of causation numbers in our reports at all. Those are generated by the Department of Labor.
DR. ZIEMER: That's why I asked what instructions you give them on -- on this.
DR. NETON: We give them no instruction, to my knowledge, on the number of significant figures they carry out their -- their letter to the claimants informing them of their decision.
DR. ZIEMER: You think they would be --
DR. NETON: Amenable to some -- some advice?
DR. ZIEMER: Well --
DR. NETON: I think --
DR. ZIEMER: -- maybe I'll ask Jeff.
DR. NETON: Yeah, he has --
DR. ZIEMER: Has anyone determined that -- that there should be that many significant figures? I guess I would argue that I -- it's almost -- you know, I might tolerate one decimal place, and I'm -- even would question that, but who's determined that we're going two and three

decimal places on this? Has anyone made that determination?

MR. KOTSCH: (Off microphone) (Unintelligible) we just -- do I need to get up here?

DR. ZIEMER: Yes.

MS. MUNN: Yes.

MR. KOTSCH: We just report what basically comes out of IREP. IREP comes out to -- you know, to the hundredth digit, basically, but we've had discussions recently about whether it's prudent probably just to go with the full percentage. You know, like a 27 rather than a 27.12 percent because we don't know what the validity of --

DR. ZIEMER: Exactly, and --

MR. KOTSCH: -- the real difference in the number is, anyway.

DR. ZIEMER: -- most of the ones that we're seeing are going out to two decimal places, and sometimes three.

DR. NETON: Right. I think Jeff raises a good point. IREP does generate it out to two decimal points, and I think the -- the claimants run it and it doesn't show those decimal points, it may raise some concern in

their mind. And probably the place to start is to adjust IREP to --

DR. ZIEMER: Maybe we could have --

DR. NETON: -- to put the --

DR. ZIEMER: -- IREP itself do the truncation.

DR. NETON: Yeah, we could do that. That's a good suggestion.

MR. KOTSCH: Labor didn't want to report anything that they couldn't duplicate -- the claimant could not duplicate if --

DR. ZIEMER: I understand, yeah.

MR. KOTSCH: -- they ran it themselves, so that's the way the machine right now is set up. When you -- when you plug the number in, it generates like that, so we just carry that. But we have had discussions about truncating it, basically.

DR. ZIEMER: It's the -- it's the argument that John Poston has with his students. They'll say well, my -- my hand-held calculator gave me 27 decimal points. You know, that's the answer. No, it's not.

Okay, I just simply raise that point. I -- I think it's very misleading to people.

DR. WADE: Who has to fix IREP -- so --

MR. ELLIOTT: We have to charge our contractor to fix the IREP software. And the IREP software is a publicly -- you know, we have it publicly available so people can go in and insert their own data and come out -- and we want them -- that's what DOL's been after for -- from the start of the program. They want to be able to see the claimant reproduce the data that they get.

DR. ZIEMER: That's my personal view. I don't know how the other Board members feel, but --

MS. MUNN: Yes, it should be truncated to no more than one decimal point.

DR. ZIEMER: Okay. Mark, you have a question.

MR. GRIFFON: Just a -- curious -- curious, Larry. I'm glad you noted all those procedure numbers. I'm -- I'm not sure if -- at this point, but I'm sure John was taking notes and has this -- whether SC&A has reviewed any of these procedures.

DR. MAURO: (Off microphone) A lot of them we're very (unintelligible).

MR. GRIFFON: Some of them you have?

DR. MAURO: (Off microphone) Yes, some (unintelligible) in fact, that's why I handed

out the list of procedures (unintelligible).
MR. GRIFFON: Right. So -- so we'll -- we'll -- we'll look over these and -- and consider them if they're not on our list for review. I'm especially interested in some of the ones where -- where you noted that there are a series of 19 questions that --
MR. ELLIOTT: Yeah, you may not have the checklist. I think that was something I wanted to reveal in case you didn't -- you weren't aware that we used checklists --
MR. GRIFFON: Right, I wasn't aware of that.
MR. ELLIOTT: -- in some of these quality control steps.
MR. GRIFFON: Right.
MR. ELLIOTT: The procedures announce those, but if -- you know, if you haven't gone -- drilled down to that level --
MR. GRIFFON: Right.
MR. ELLIOTT: -- you may not have picked them up yet.
MR. GRIFFON: And that's the detail I think would -- which would be useful to look at for us.
Secondly, is there -- is there a similar

process to this for your other -- your TBD documents, your site profile documents, as far as your peer review and -- and --

MR. ELLIOTT: Yes. Yeah, that was -- that (unintelligible) --

MR. GRIFFON: That's maybe (unintelligible) --

MR. ELLIOTT: -- covered on the last few slides.

MR. GRIFFON: Okay. I'm sorry.

MR. ELLIOTT: Yeah. There are procedures that prescribe how Technical Basis -- technical information documents are not only to be developed, but how they're to be quality controlled and quality assured through that process.

MR. GRIFFON: I hate to -- I guess one of the questions I raise that question is -- and I'm going by memory here, but I -- I seem to recall that several of the site profile documents have three or four or five signatures, I forget how many, and often they're on the same day, which is the day that -- that I guess each agency approved or each entity approved. Obviously there was no time for peer review if everyone was signing -- signing on the same day.

MR. ELLIOTT: Peer review almost happens concurrently. It's been -- you know, it's been our practice and our policy to get these documents into use as quickly as possible, so it -- it's not so much an iterative review as it is a concurrent review --

MR. GRIFFON: I knew it --

MR. ELLIOTT: -- 'cause comment resolution has to happen, and once that comment resolution has taken place, we're all ready to sign it.

MR. GRIFFON: Right, that's -- that's what it looks like. I -- I noted on the DR reports it -- it looks like step-wise more that there's a lag between the -- the reconstructor finishes and hands off, and the peer reviewer then does their -- you know, so --

MR. HINNEFELD: And if I can offer a comment on a site profile TBD document, the comment and resolution process occurs before the first signature -- signature is affixed, so after all the resolution is done, then the signatures are affixed at that point.

DR. ZIEMER: Other comments or questions? Roy.

DR. DEHART: Just a question. On the communications side where we're dealing with

your web site, I've noticed at times when I've gone into the update section that the blue line address will carry me into the major heading area, but not necessarily down two or three more levels I have to go in order to get to that topic.

MR. ELLIOTT: Okay.

DR. DEHART: If that could be taken care of and add the rest to the address, it would be helpful.

MR. ELLIOTT: All right. Very good. Let me -- I may ask Chris Ellison to give you a call so that you can articulate what you're -- this specific interest is so she can hear it directly from you and --

DR. DEHART: Okay.

MR. ELLIOTT: I can carry it back, but I want to make sure that she understands clearly what -- what you're seeking. I think I know.

DR. ZIEMER: For example, when we get the update information from Chris, she'll say the page has been updated with this information. But when you click on the link, you just get the main page. You don't -- you don't go to that --

MR. ELLIOTT: Okay, I see what you're saying. I'll talk to her about that. Thank you.
DR. ZIEMER: Gen Roessler.
MR. ELLIOTT: Good comment.
DR. ROESSLER: On that item, too, we often get announcements from Chris that say they -- this will appear on the web site later today. I guess I'd prefer getting it after it's there because by later today I've totally forgot-- I mean, you know, I've done another half a dozen things and I've totally forgotten about it. There may be a reason for that.
MR. ELLIOTT: Well, it -- our web page update happens late in the afternoon, after Chris leaves. It's a -- it's a logistical timing issue with -- with our web folks, so she does her business, she provides it to them, and they are scheduled to upload that. Now we can change the notice and say yesterday it was uploaded. If that's what you want, we can certainly do that.
DR. ROESSLER: I'd -- I'd find that easier.
MR. GRIFFON: That way it's there.
DR. ZIEMER: For those of us over a certain age, afterwards is better. Right?

DR. ROESSLER: Right.
DR. ZIEMER: I'm not speaking for you, Gen.
MR. ELLIOTT: I like that suggestion actually, because it will aid us to make sure -- you know, one of the -- one of the criticisms we've had of late is notification of working group meetings. And Chris has been charged with making sure that notice happens, and there's various ways that happens. It happens on the web site, but it also happens by an e-mail distribution list that she generates, and one that LaShawn, your committee management specialist, generates. So we touch people in different ways, and it would be better if the web site was done the day before so that Chris can assure that it's up there when she says it's up there.
DR. ZIEMER: Mark.
MR. GRIFFON: Just to follow up on my -- my last line of questioning, but -- I was wondering if this -- this peer review -- the comments that are received in this peer review process, either for site profiles and/or for the case reviews, are something that are available to SC&A and the Board when we review

specific --

MR. ELLIOTT: Sure.

MR. GRIFFON: -- cases or are they all part of the DR file.

MR. ELLIOTT: It's a controlled document system that we have capturing all comments.

MR. GRIFFON: So those comments are -- are -- I think --

MR. ELLIOTT: You can go -- you --

MR. GRIFFON: There's a form -- I've seen it on the O drive. There's forms that capture comments in the resolution and --

MR. ELLIOTT: Certainly available to you, yeah.

MR. GRIFFON: Okay. 'Cause I think that's important --

MR. ELLIOTT: Essentially what it says -- who's the reviewer. Somebody like Jeff Kotsch will send us reviewer and it'll have his initials or his name and it'll say what his comments are, what his issues are. Then there'll be another column that says who addressed them, how they were addressed. That's -- that's captured.

MR. GRIFFON: I guess the -- the other reason I'm raising this is -- is for SC&A and my fellow Board members, that -- that if there was

an internal peer review process, I think it might benefit us in our resolution process. If SC&A is looking at a site profile document and they have this finding, but they see that that -- someone in a peer review process already brought this up and this is how it was answered, maybe -- maybe it's not even a finding. You know what I mean? So it would be helpful if they could look at those internal comments --

MR. ELLIOTT: Well, it can -- it can also explain the logic of how the comment was addressed and whether or not we saw it as a major issue or was it such a deficiency that we had to make a change or did we dismiss it. I sus-- so you would see that.

MR. GRIFFON: Right.

MR. ELLIOTT: You would also see -- I think it's important for conflict of interest, you would see who's opining about a given technical question.

MR. GRIFFON: Right.

MR. ELLIOTT: You know, and who wins in that -- in that give and take, that exchange on -- on the scientific debate or the technical debate

that goes on about that question.

MR. GRIFFON: So -- so I -- I don't know, I may be wrong, but in -- in each case that's on the O drive, is that part of that case package? I'm -- I'm using the wrong terminology, but --

MR. ELLIOTT: Each -- each dose reconstruction --

MR. GRIFFON: Yeah.

MR. ELLIOTT: -- case or each -- are you talking Technical Basis Documents?

MR. GRIFFON: Each DR case I'm talking now.

MR. ELLIOTT: Stu, you're going to have to help me out on the DR side.

MR. GRIFFON: I -- I haven't seen --

MR. ELLIOTT: I'm more familiar with --

MR. GRIFFON: I haven't seen review comments in there. I'm assuming there were some or --

MR. ELLIOTT: We capture the review, I believe -- Stu'll talk about this, but --

MR. GRIFFON: Yeah.

MR. ELLIOTT: -- go ahead, Stu, please.

MR. HINNEFELD: Until several months ago they would not be in there at all. They -- they -- we have them all. They would be on a directory that we would have to provide them to you

separately. For the past -- I forget how -- the length of time, if we comment on and return a dose reconstruction -- okay? -- if it's -- if we get a dose reconstruction and approve it, there would be no comment form generated. If we comment and return for -- for revision, that comment form will be stored -- it should be in the case file. I have to go check and verify this, but it should be in the case file under ADR files, but it will be an older version. If you go -- if -- for a -- for a -- for a dose reconstruction report under ADR files folder, the -- the one that's approved is in the last version. So if -- you know, it comes over there -- originally it comes in a single folder. If we comment and return, we put our comments in that folder and it go-- it's translated back over to ORAU in that fashion. So then they resubmit the dose reconstruction with the comments resolved in a new folder, and the one that -- the folder that was already there gets a date assigned to it. So -- so it will be in -- you know, the comment form with resolution would be in that. I think that's where it would be. I have to -- I'll send you

a note to make sure.

MR. GRIFFON: And we -- we can deal with this on the workgroup level, too, maybe, but I just want to let people know that this -- those comments are on -- on -- on the O drive available for us and I think they would expedite our review in many cases or, you know, enlighten our review --

MR. HINNEFELD: Okay.

MR. GRIFFON: -- of the cases and now site -- the site profiles is a separate question I think.

MR. HINNEFELD: We would have to -- we would have to get those.

MR. GRIFFON: Okay.

MR. HINNEFELD: I mean we have them and we would just have to make them -- make them available.

MR. GRIFFON: Okay, 'cause I've not -- I've not seen --

MR. ELLIOTT: But they're more readily available in a document control system, database system that we maintain -- for --

MR. HINNEFELD: Yeah, yeah.

MR. ELLIOTT: They're not on an individual DR

basis, you see. They're not on an individual document basis.

MR. HINNEFELD: Okay. Okay, we'll...

DR. ZIEMER: Other questions or comments?

(No responses)

Okay. Thank you very much, Larry.

BOARD WORKING TIME, DR. PAUL ZIEMER, CHAIR

I want to move quickly into our -- this is our Board working time right now starting. We have a carryover item from Wednesday and that is some approval of some minutes.

DR. WADE: Well...

DR. ZIEMER: Huh?

DR. WADE: Ed Walker.

DR. ZIEMER: Oh, yeah.

DR. WADE: He wants to say something.

DR. ZIEMER: Ed, you have a comment for us?

MR. WALKER: A few.

DR. ZIEMER: Okay.

MR. WALKER: I'd -- I'd like to -- I'll make it quick. I won't drag it out. I'm going to be meeting with NIOSH, as Mr. Elliott said, on the 21st and I have quite a few issues that I want to discuss and they're coming up of course to get the last issue resolved that they had which

is the cutting of the cobbles, and I've gotten my few men together that are still alive and we're going to have a -- I hope a pretty good discussion, but I -- I have quite a few issues with our group that I also have that aren't finished. And it's my understanding, and if I'm wrong, please correct me, but this issue will be the last issue from Bethlehem Steel. I feel my issue should be reviewed, also, that I have, because I think they're important issues. I've gone over them with the Congressional people. They've all sat down and listened for an hour or two hours. I gave them documentation and proof of what I talk about. I never once since I started with this Board have come up and told some -- something to you that I didn't firmly believe or could back up in my heart. Okay? So I -- I want to go over these issues and I -- and I really hope that the Board will consider them before any documentation is closed up for Bethlehem Steel. I would appreciate that.

Just a couple of the items is the group -- we -- we have monthly meetings, as you probably all know, and we're really concerned about the way

the Bethlehem Steel site profile dose reconstruction has been handled from day one. One, Bethlehem Steel had a contract with the government, and it's certainly documented, from '49 to '52. Two years -- the first two years there are no records, period. I've looked, I've asked, I've hunted and searched. There are no records. So -- the also -- the document that we do have is the Wayne Range* letter. So I referred to that -- it said Bethlehem Steel used the rolling facility. That's all they used and they done rolling. It's -- it's -- in the Wayne Range* letter it says there was also another facility at Bethlehem Steel, the blooming mill. I brought this up. The response that I got was this Range (unintelligible) -- it's a tongue-twister and I -- I'm -- I had a birthday so bear with me -- isn't a strong enough document to take that into account, but it is a strong enough document for NIOSH to quote it, I believe six plus times, in their special -- or the technical base document. And why can't the claimants use this -- we have no proof. Most of the people are dead. The elderly -- the

wives and the children of the people that have died years ago, there's very few people left. I -- I was 18 when I started there and I'm 73, so you can't find a bunch of people that have much information to dig back and look into. And you don't have many people that -- trust me, I really dug to get the -- the proper -- I can't just call somebody and say we're having a meeting, NIOSH wants to talk and they want to talk what went on at Bethlehem Steel 50 years ago. That does not happen.

I've talked to a lot of people. There's a lot of people I talked to that I don't believe myself are credible, and I would not come down here to -- in front of the Board and -- and make up a story. That's not for me to do. I -- I talk to them. I listen to them. And if they tell me what they've seen -- many of them will tell me Ed, I don't know. I worked in this part of this -- this facility was four -- three football fields long and it was 100 feet wide, and it was operations from -- went on from grinding to shipping. And there's a section in the middle that was the cooling bed. And they say well, I worked over here -- I was

by the rollers and this was my job. I went to work at night. That-- that area I worked in was as big as a football field. I don't know what went on over at the shearer's bed. So I says okay, what do you know? Just one of the claimants -- and briefly told me well, I remember the men with the white hats. I says that's great, what -- what -- what does that do for you? He says they handed me the Geiger counter. And I says I don't think they did that. I says that wasn't you job; that was the government people. And he firmly said no, it was a Geiger counter. And I says well, you know, when they run these rods through the rollers, a lot of times the temperature gauges got steamed up and I know it's documented in the documentation that they put men in between these rollers to hold the temperature gauge. He says Ed, I told you it was a Geiger counter. I says well, what was your job? He says the white coats handed it to us guys, told us to go over and hold it within a foot or two foot from the rolling, right above the uranium -- red hot uranium that's going through. And I says what did you do then? He says we stayed there until

they called us back. And I says what did they do? He says I don't know where it went. He says I didn't know if it was hooked up to something or if there was a reading on there or what. Well, I don't know, either, but I kind of think he was a credible man to talk to. He wasn't -- he wasn't telling me a story, and that was from his heart. He's 81 years old. So we have this -- no documentation from 1949 to 1952 there are no records. How do we know what they done at Bethlehem Steel? Because there's no records doesn't mean there was nothing done. Because there was no records doesn't mean there was a rolling. We'll give you a rolling for that. No, we don't know what we had. It was experimental. What types of material were they working with? Nobody knows, 50 percent of the information is completely gone. The government documentation admits that this information they threw away or destroyed. What is a claimant supposed to do? Where do we get our information?

Believe me, I -- and I know you people have worked darned hard for the last three, four, five years, and it's tough and I know what --

what you're going through. I'm working by myself and -- and getting together what I can get together and I find these inconsistencies in this program. And there's many more. There's the issue of -- I talked in my letter probably to Mr. Elliott about 28,000 square feet. We brought this up at St. Louis. It wasn't 28,000 square feet. This issue was -- there was no cooling bed knowledge from anybody that I heard out in California that there was a cooling bed. There was a schematic showing -- that didn't show a cooling bed. A third of that side of that building was used as a cooling bed. And I was asked to draw a sketch. I went and I talked to the workers. I remember the cooling bed, but very -- I couldn't put it in -- down. But I have a little bit of artistic ability and I says if I know it's there I can put it together in my head. I just didn't draw that picture and send it down to NIOSH. I drew what -- the information I got from the workers. I went to one worker that was a inspector in the cooling bed, who walked across the top of this bed. I knocked on his door and I says Ed, I've -- I got a little

picture that I drew up and I want to know if it looks like -- if that's the cooling bed in your (unintelligible). He had it -- he didn't have it a minute and he says Ed, he says you've got it perfect. And he says there's more stuff in there, there's more motors and more -- and I says I understand, but to put more in I would -- I couldn't put the basics of it in, so -- that area was down below. The uranium run across this cooling bed a third of the size of that factory, and it laid out there in red hot rods from one side to the other of this cooling bed, which was about 70 feet wide. So above the 28,000 square feet in the sub-basement, there's 28,000 square feet on top that NIOSH never took into consideration in our dose reconstruction. So that's 56,000 square feet that was missed on the technical base document that was supposed to be researched and thought out and used for our dose reconstruction. That I don't understand. That I would like somebody to plainly -- just tell me reasonably. I'm a big boy now, my mother says. I can accept it. I -- I can -- you say look at -- this is it and this is it and this is why it didn't and

explain it to me, I can deal with it. But I can't deal with it when the answer is -- that I get -- it didn't make any difference in the dose reconstruction. I cannot see how 56,000 square feet of unmonitored uranium and the uranium that went down -- uranium is -- and I think you probably all know because you're all scientists on that. For sure I'm not, but I'm beginning to wonder -- I may be catching up a little bit. I think I'm in my freshman year with you people.

Uranium is twice as heavy as steel. This cooling bed that went over it was -- it was -- it was crawled over, it was pulled over, and I do have witnesses that are credible witnesses that says sparks was unbelievable when that uranium was going over that cooling bed. Being twice as heavy as steel, obviously it fell down into the area below. I could line up about eight people that said that area wasn't cleaned out but maybe once a month -- if it was cleaned out once a month. So obviously more of that uranium was going to be downstairs that went up into the dust into the air.

There's -- there's like over 200 motors in here

that this dust settled on. They had to change them. Guys had to go down and change them. There was -- oh, buildings that you had to put up to protect the electrical system that ran them, gears and everything, so you had to work down there at different times. Now there was more radiation down there, very obviously, than there was up above. It -- with no cleaning. I -- I just -- again, I just can't understand how this could -- how you could say that the dust went down and it mixed evenly. We don't even know, and I was never told or where it came from, how much dust did come from steel. How do we know it was the same as uranium? I have a -- and I sent it to CBS at Channel 4, and I think I mentioned it to you down in Knoxville. I have an old documentary of Bethlehem Steel. It shows the billets as they're rolling through, the red hot billets, and you can see the scaling on there. And -- you won't believe it if you saw it. I mean you actually see what was on that, the scaling. It's black and it was going through the rollers, the scaling. There -- there's a lot of issues that -- that I want to bring up at that meeting that I would

just like some reasonable answers for for our group. And -- and I don't think I'm being unreasonable because there's many more. There's more than I want to -- you know, we'd be here tomorrow morning. I've got them all documented and I wanted to -- I'm going to bring them to that meeting. But with this type of issue and me going to these meetings, and I really appreciate you -- the Board and everybody involved to make me a part of this so I can explain to you and try and show you what happened.

Bethlehem Steel is supposed to be a pilot program for the rest of the country. That's okay. You made up a dose reconstruction and I think I told Dr. Neton I think that you probably worked real hard and spent millions of dollars on it and that's okay. And I think that dose reconstruction will certainly apply to a lot of buildings, a lot of facilities in the country. And I think yes, you should go there. What kind of monitoring did you have. You know, were there accidents there. There was accidents every day at the steel plant. Because they happened at the steel plant, when

the salt bath broke down and everything was held up, that was an accident as far as I'm concerned. And if you have the proper information, then I think the dose reconstruction -- fine, use it. Use it for the people that, you know, don't deserve it shouldn't get it.

But with the information that's at the Bethlehem Steel site that is -- isn't the same as what I've been hearing through NIOSH for -- I think it was something like three years I've heard that there was no rough rolling at Bethlehem Steel. And there's a lot more to contamination when there's rough rolling. It was all done at Simonds Saw and -- oh, but Bethlehem Steel only had finished rolling. It's not the case. I got a document, a government document and I pick it up and I look at it and it said they were getting ready to go to Fernald in '52. And the document clearly states to Bethlehem Steel -- the government wrote and says we would like you to continue some more rollings until we get our facility ready at Fernald. And Bethlehem Steel's answer was yes, we'll do it, but you buy us the rough

rollers and the finish rollers.
Now to me -- and I know for a fact that Bethlehem Steel done the rough rolling and the finish rolling. But I've heard that oh, it wasn't as bad at Bethlehem Steel 'cause you only done finish rolling. That's not the case. That is not the case. Where is the reasonable explanation? How -- how does this fit in? How do you do a dose reconstruction when you don't know the procedure?
Simonds Saw facility is one-tenth of the size of Bethlehem Steel facility that they used. There is not one procedure at Simonds Saw that is equal to Bethlehem Steel, and there is no other -- well, we found out from here or we found out from there this is what exposure was -- because there was no other facility in the world like Bethlehem Steel. The whole purpose for the government to go to Bethlehem Steel to do it was to develop a new pass schedule and rolling schedule. To developing the new pass schedule it had to be applied. You do not walk in a factory that size, roll uranium on a Saturday -- they ship it in Friday or whenever they shipped it in, pull it in the mill and all

of a sudden start to roll uranium. They had to experiment with it, and that experimental time had to be in the earlier years. As I said, they -- that wasn't done the day before. And that -- and I think you would all agree that rolling uranium had to be a process. There was a lot of testing, there was a lot of heating, there was a lot of running through the rollers. There was making the rollers, expensive rollers. There was building the salt bath. There was testing it with stuff. We don't know what was involved. Was there thorium involved? Could have been. They had it at Simonds Saw. Are we sure? Well, there's no records. No, there's no records. There are none. They destroyed them. So why should Bethlehem Steel, the claimants, be penalized when the government threw the information away? That's not our fault.

As I told you -- and I'll mention it again, I worked with a crew, a hot crew that just went on hot jobs -- not hot as far as uranium goes. Could have been, but it was just hot work and we specialized and we went to these different buildings. Out of the 15 people that I worked

with, 13 are dead. And as far as we can find out, all of them died of cancer. We've researched that with some of the fellas that I still know that work there. The two of us that remain, you know already, both of us have cancer.

I had a man come into one of our meetings a couple of weeks ago. He lived within -- he lived within about 100 feet -- there used to be a road there. We've -- I didn't get that documented. I've got pictures of the plant and that -- he lived about 100 feet, maybe a little bit more, away from the 10-inch bar mill. Since then the road is gone and all that's gone. In his family -- in his family alone, and he'll take this under oath, there was five people that died, between uncles and fathers and brothers, died of cancer. I don't know what kind, didn't get into it. His wife also lived on the same street. They had five children. Two of them were born with -- stillborn with birth defects.

Now I don't believe that's a coincidence, and I don't believe that's the national average. But something was there. I don't know what. I --

I firmly in my heart believe there was gamma rays there, also. And of course that doesn't only affect the lungs, that attacks all the organs and I'm sure you know all that -- and I learned it from you so you must know it. But there are issues like this that I want to present NIOSH. Some of them aren't severe, some of them are minor. Some of the minor ones I'm not even going to worry about. It's contradictory, I don't -- I don't care. It's the big issues. It's -- it's the where you took your breathing zone samples. How did you get breathing zone samples from a building that's one-tenth of the size of Bethlehem Steel? Answer me these questions. Where do you get the comparison? And that's -- that's what I'm here for. That's what I've been fighting for, and that's what I hope that you look at this and take it into consideration and just -- if it was one of your family and we said son, go work at that plant, you only got three percent chance of getting cancer, would you expose him to that three percent? Thirty-four percent of the people in the United States are going to die from cancer. You could have

been one of them with that three percent. There is no -- there was no history of cancer in my family. They all came from Switzerland, and I -- I went back there -- I got relatives living there now. Not one cousin, not one uncle, not -- no one has ever had cancer. That doesn't mean that I'm not going to get it, but it kind of makes you wonder. I worked down there. And I also worked as a subcontractor in the plant back in '99 and I put -- I build a building. I had my own construction crew. I build a building within 100 -- about 100 yards from the old 10-inch mill. And when we dug the foundation it was just filthy dirty water in there. And I know for a fact that that's where they used to run the water out -- Arjun knows because he came up to Buffalo. He knows the layout of the facility, and that's where they used to run the -- when they washed down the facility, went out into a pit. I was within 50 feet of that pit when we dug this one here. I don't know if it was active or not. I had no id-- I didn't know -- I had no idea till we heard of the program in 2000. But I'll leave it at that. I would certainly like to be with

you at the next one, and I really would like you to consider what the Senators and -- and as I said, I sat down with all five of them in our area. They know the area and they believe that what I've showed them is correct.

DR. ZIEMER: Thank you, Ed.

MR. WALKER: I want to thank you again, and please give us consideration.

DR. ZIEMER: Thanks, Ed, and you'll -- you'll be kept informed. I -- do we have that meeting date set for that?

DR. WADE: Yeah, I think it's set.

MR. WALKER: June 21st.

DR. ZIEMER: Okay, so -- okay, thank you very much.

Now on our working activities we have a set of minutes from March 14th, which is our telephone meeting, that needs to have action. I'd like to call for a motion to approve those minutes.

MR. PRESLEY: So moved.

MS. MUNN: Second.

DR. ZIEMER: Corrections or additions to the minutes for March 14th?

(No responses)

If not, all in favor of approval, aye?

(Affirmative responses)

Opposed, no?

(No responses)

So ordered. We also have two sets of subcommittee meetings. The full Board can act in behalf of the subcommittee. The subcommittee meeting of October 17th has not been acted on. We've had opportunity to review those. A motion to approve?

DR. DEHART: So moved.

DR. ZIEMER: Second?

MR. PRESLEY: Second.

DR. ZIEMER: Omissions or corrections?

(No responses)

I assume particularly all of you have read those sections that pertain to the issues that you addressed, so...

All in favor, aye?

(Affirmative responses)

Any opposed, no?

(No responses)

Okay. And then finally the subcommittee minutes of January 24th. Motion to approve?

DR. LOCKEY: So moved.

DR. ZIEMER: And seconded?

MS. MUNN: Second.

DR. ZIEMER: And seconded. Any omissions or corrections?

(No responses)

If not, we'll vote. All in favor, aye?

(Affirmative responses)

Any opposed?

(No responses)

I didn't ask for abstentions. I assume there are none, so we'll consider those approved.

DISCUSSION OF THE BOARD'S USE OF SUBCOMMITTEES AND WORKING GROUPS
DR. PAUL ZIEMER, CHAIR
DR. LEWIS WADE, EXECUTIVE SECRETARY

The final item that we have actually before us has to do with the workgroups and the subcommittee, and I'd like to summarize -- we know what the workgroups are 'cause we've summarized them earlier, the workgroups on the various sites. We know what the workgroups are on the dose reconstruction. We went through those earlier this week. The other item I'd like to get some feedback on, we talked about it earlier, has to do with the subcommittee. What I'm going to suggest is the following, and I'll put this out as a straw man and you can suggest changes if you wish. I'm suggesting

that we -- rather than have the full Board act as a subcommittee -- is to actually designate four Board members to be the subcommittee, plus two alternates, so to have six people be what we'll call the dose reconstruction subcommittee. We have been calling them dose reconstruction and site -- site review --

DR. WADE: Site profile review.

DR. ZIEMER: -- site profile review committee, but we're -- we've been moving toward having individual workgroups now on the various sites, so that part is going away in a natural way. But for dose reconstructions, as an over-- overall coordinating group for the mat-- dose reconstruction matrices, particularly, we do need to keep the subcommittee in place. So let me ask you first -- and how we would then operate, for example, if we have half-day meetings like we did at this meeting, it would just be that smaller group. This would allow also the other workgroups, if they wish to meet during that period, to meet separately. Now there may be some overlap so we'd have to coordinate that, but at least that would be a possibility. But how do the rest of you feel

about going to a smaller, specified group? This would also allow us flexibility, if we need to develop other subcommittees, to have personnel available for that. Any reactions?

MS. MUNN: I think that's a fine idea if we have the people to do it. The availability of the members of this Board is fairly limited, and I --

DR. ZIEMER: Well, interestingly enough, our experience has been that almost everybody comes anyway.

MS. MUNN: Everybody comes, yeah, because of the timing.

DR. ZIEMER: Right.

DR. WADE: The timing is --

MS. MUNN: It's an appropriate time.

DR. ZIEMER: Right. Is there any objection to moving in that direction? We will have -- we will have to modify the charter for the subcommittee. That is, we would basically have to name -- rename the membership, and we would have to modify the part -- portion that deals with site profiles --

DR. WADE: And I can do that once --

DR. ZIEMER: -- but we can do that once we take

the action.

DR. DEHART: Are you needing a motion?

DR. ZIEMER: I'll need a motion to -- to modify the structure of the subcommittee to, number one, restrict it to dose reconstruction review activities, and two, to limit the membership to four members plus two alternates. And we would -- if this passes, then we would -- we will determine who those will be.

DR. DEHART: I would so move that as specified.

DR. ZIEMER: Moved and a second?

MR. CLAWSON: Second.

MR. GRIFFON: Second.

DR. ZIEMER: Okay. Any discussion pro or con? If there's another scheme you'd rather have -- okay.

DR. ROESSLER: It sounds reasonable.

DR. ZIEMER: Okay, let's take action, and if it -- if it passes, we will look at the membership.

All in favor, aye?

(Affirmative responses)

Any opposed, no?

(No responses)

Any abstentions?

(No responses)

Motion passes. I'd like to propose that the current chairman, Mark, remain in that position. The -- the dose -- or the site profile part has been handled largely by what we call the working group but was officially still part of that, and that was Mark and Wanda --

MR. PRESLEY: And me.

DR. ZIEMER: -- and Bob, and I think Mike.

DR. WADE: Right.

MR. GRIFFON: Yeah.

DR. ZIEMER: And I guess I would ask as a starter if those four individuals would still be willing to constitute now this subcommittee.

MR. PRESLEY: Do you want -- do you want somebody on there that -- is it going to be site profiles?

DR. ZIEMER: No, it's going to be dose reconstructions.

MR. PRESLEY: I mean dose reconstructions.

MR. GRIFFON: Going to be the cases, right.

MR. PRESLEY: Then I -- then I would suggest that you take me off and put somebody on there that's got more experience and more -- knows

more about dose reconstruction than I do. I would suggest Gen Roessler or Bob -- John, either one.

DR. ZIEMER: Right, we -- and we could do that, and perhaps you'd be willing to be one of the alternative -- alternates, 'cause we're going to need two alternates.

Okay, John, would you be willing to be on this subcommittee?

DR. POSTON: Sure.

DR. ZIEMER: Okay. So the subcommittee would be Mike, John, Mark and Wanda.

DR. WADE: Mark as chair.

DR. ZIEMER: And Mark would serve as chair. The alternates would be Bob and I -- I think -- I'd like to get maybe someone sort of on the worker side, and Brad, if you'd be willing --

MR. CLAWSON: I'd be willing.

DR. ZIEMER: -- to be an alternate -- I don't want to overwork you 'cause we're a little short-handed in that end of the spectrum, but --

MR. CLAWSON: No problem.

DR. ZIEMER: Okay, let's name Brad as an alternate.

DR. WADE: Okay, so the title would be Subcommittee on Dose Reconstruction Review Activities, chaired by Mark, sitting members Mike, Wanda, John, alternates Bob and Brad.

DR. ZIEMER: Correct. And I don't think that require-- I think I'm authorized to appoint those, but we do need to get the charter revised and it may be that we'll have to take formal action -- I'm not sure what is required. I think -- I think we understand that the -- the current charter has to be --

DR. WADE: Right, I'll bring the charter to the October 8th call. We can --

DR. ZIEMER: Okay, let's -- yeah, why don't we do it in August instead of October.

DR. WADE: August, I'm sorry.

DR. ZIEMER: I --

DR. WADE: Working group on denied SEC petitions Lockey has offered to chair.

DR. ZIEMER: Oh, yeah, the other work-- the other workgroup that we talked about earlier in this meeting was the workgroup to review the -- those 28 or 30 SEC petitions that were not --

DR. WADE: Denied.

DR. ZIEMER: Yeah, they were -- Dr. Lockey has

-- has volunteered to chair that, and we would need two or three additional volunteers to work with him on that.

DR. ROESSLER: (Off microphone) (Unintelligible)

DR. ZIEMER: Gen Roessler, any -- one or two --

DR. WADE: Dr. DeHart.

DR. ZIEMER: DeHart. Three is enough. If there's one other that wishes to volunteer, we'll add a fourth, but -- okay.

MS. MUNN: I can -- I can do that if the -- if the overlap is not -- if the timing overlap is not bad.

MR. GRIFFON: Jim Melius expressed an interest in that. I don't know if you had enough already.

DR. ZIEMER: Well, we have -- we have three.

MR. GRIFFON: I'll vol-- I'll volunteer him.

DR. ZIEMER: Maybe -- maybe Dr. Melius would be -- put him on there, okay. He's not here to defend himself.

Okay, thank you very much. I think that covers all of the issues that -- we've already talked about the schedule for future meetings --

DR. WADE: Right, I would encourage the working

group chairs to put their mind quickly to the next meeting and get with me and let me know. Sometimes it's good if we sort of collect these meetings together so we can engage in some e-mail discussion about doing it, but there's a great deal of interest in people pursuing our activities on site profiles -- Hanford, Nevada Test Site, Savannah River -- so I think it's important we move with some dispatch there.

DR. ZIEMER: Are there any other items that need to come before us? Anything for the good of the order?

(No responses)

If not, I thank all the Board members, as well as the staffers, those who are still -- still on their feet, as it were. Thank you for all your hard work and good efforts on behalf of this program. We'll look forward to seeing you -- or hearing you by phone and seeing you next time.

We are adjourned.

(Whereupon, the day's business was concluded and the meeting was adjourned at 3:18 p.m.)

CERTIFICATE OF COURT REPORTER

STATE OF GEORGIA

COUNTY OF FULTON

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of June 16, 2006; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 8th day of July, 2006.

_____

STEVEN RAY GREEN, CCR

CERTIFIED MERIT COURT REPORTER

CERTIFICATE NUMBER: A-2102