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

MEETING 52

ADVISORY BOARD ON

RADIATION AND WORKER HEALTH

VOL. I
DAY ONE

The verbatim transcript of the 52nd Meeting of the Advisory Board on Radiation and Worker Health held at the Suncoast Hotel and Casino, Las Vegas, Nevada, on Jan. 8, 2008.

STEVEN RAY GREEN AND ASSOCIATES
NATIONALLY CERTIFIED COURT REPORTERS
404/733-6070

C O N T E N T S

Jan. 08, 2008

WELCOME AND OPENING COMMENTS 8
DR. PAUL ZIEMER, CHAIR
DR. LEWIS WADE, DESIGNATED FEDERAL OFFICIAL

MOUND PLANT SEC PETITION 10
DR. BRANT ULSH, NIOSH
PETITIONERS

LAWRENCE LIVERMORE NATIONAL LABORATORY SEC PETITION 78
DR. SAMUEL GLOVER, NIOSH
PETITIONERS

NIOSH PROGRAM UPDATE 135
MR. LARRY ELLIOTT, NIOSH

PUBLIC COMMENT 167

COURT REPORTER'S CERTIFICATE 230

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

BEACH, Josie
Nuclear Chemical Operator
Hanford Reservation
Richland, Washington

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

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

SCHOFIELD, Phillip
Los Alamos Project on Worker Safety
Los Alamos, New Mexico

SIGNED-IN AUDIENCE PARTICIPANTS
AND IDENTIFIED TELEPHONIC PARTICIPANTS

ADAMS, NANCY, NIOSH
ANSPAUGH, LYNN, SC&A
BARATCART, CLAUDIO, H&N
BARKER, KAY
BARRIE, TERRIE
BONSIGNORE, ANTOINETTE, LINDE CERAMICS
BREW, MICHAEL S., PAST EMPLOYER
BREYER, LAURIE, OCAS
BROCK, DENISE, NIOSH
BROEHM, JASON, CDC WASHINGTON OFFICE
CAMERON, BUCK, ATL INT
CANO, REGINA, DOE
CHANG, C, NIOSH
CHEW, MELTON, ORAU
CLAYTON, DOROTHY
COOK, PATTY, NTS
CRAWFORD, FRANK, NIOSH
DECKER, MARILYN
ELLISON, CHRIS, NIOSH
FITZGERALD, JOSEPH, SC&A
FUNK, JOHN R., AVV NEVADA
GLENN, RAILI, LLNL PETITIONER
HINNEFELD, STUART, NIOSH
HOMOKI-TITUS, ZEDA, HHS
HOWELL, EMILY, HHS
HYATT, SALLY
JENKINS, SHERMAN, LLNL
JENSEN, DEB, EKCAP
JOHNSON, TRACY, DOL
KOTSCH, JEFF, DOL
LAMB, DONNA
LEWIS, GREG, DOE
LEWIS, MARK, ATL
LOCK, JW, SELF
LONG, CHRISTY A., DOL
MAKHIJANI, ARJUN, SC&A
MAURO, JOHN, SC&A
MCFEE, MATTHEW, ORAU
MCKEEL, DAN, SINEW
MILLER, JUDY, PET

MORGAN, WALLACE
OH, KATE, SEN. REID
OSTROW, STEPHEN, SC&A
PADILLA, ANNA
PITTARO, CAROL A.
RADWANSKI, FRED, SELF
REEVE, DAVID, DOL
RIOS, DIANE
ROBERTS, KIMBERLEY, SAIC
ROBERTSON-DEMERS, KATHY, SC&A
ROLFES, MARK, NIOSH OCAS
ROLLINS, EUGENE, DMA
ROZNER, KATHLEEN, SEN. REID
RUSSELL, LARRY, MOUND PETITIONER
RUTHERFORD, LAVON, NIOSH
SEPULVEDA, TERI, NTS
SIECK, BRENDA
SINGER, EUGENE, DOL
SMITH, BASIL L, LLNL
SMITH, BILLY P., MH CHEW AND ASSOCS.
SNIDER, ANN
SPECK, BRENDA, NTS
ULSH, BRANT, NIOSH
VAUGHN, LEE
WILLIAMS, JOHN, GE HANFORD
WORTHINGTON, PAT, DOE
ZACCHERO, MARY JO, ORAU
ZARITO, FRANK
ZOITOUR, ABE, SC&A

P R O C E E D I N G S

(1:15 p.m.)

WELCOME AND OPENING COMMENTS
DR. PAUL ZIEMER, CHAIR

DR. ZIEMER: Welcome, everyone. I'd like to call the meeting to order. This is the meeting of the Advisory Board on Radiation and Worker Health. We're pleased to be here in Las Vegas; pleased to have the opportunity also during our meeting to hear from a number of the local folks. In that connection, there is a sign-up sheet in the foyer for those who may wish to make public comment later in the meeting.

Also there is a registration booklet. We ask you to register your attendance. This includes Board members, federal staffers, members of the public. Just -- we would like to have a record of who's in attendance here.

On the tables in the back of the room there are copies of the agenda, as well as copies of a number of documents that will be associated with our deliberations today and for the next three days, actually. So please avail yourselves of those as well.

On the agenda we typically will follow along in the order that's indicated. The stated times in general are not time-certain times. That is, if we go longer, we go longer. If we finish sooner, we go on to the next item. So we will consider the agenda as a guide, but flexible as the need arises.

I'm Paul Ziemer, Chair of the Advisory Board. Dr. Lewis Wade is our Designated Federal Official. All such federal advisory boards have a Designated Federal Official who helps keep us in order and takes care of us in many different ways.

Lew, we're glad, as always, to have you with us. You have some opening comments for us.

DR. WADE: Well, first I bring you warm regards from the Secretary of Health and Human Services, Mike Leavitt; the Director of Centers for Disease Control, Dr. Julie Gerberding; and John Howard, the NIOSH Director. I always, at every opportunity, thank the Board for its service. Any of you who have had an opportunity to watch this Board or its working groups have to come way with the understanding that this is as hard a working advisory board

as exists in my experience within the federal government, and I thank them all for their service.

I believe that tomorrow at 9:00 a.m. we're expecting a visit from Senator Harry Reid to come and speak to the Board. Just to let you know, that doesn't appear on the agenda, but that is at least the latest information that I have in terms of the good Senator's visit to us.

I'd also let you know that I'll be sharing this chair with Dr. Christine Branche. She will be taking over the responsibilities from me in the near future, and you'll see her up here sometime and me at other times. We're easy to tell apart. I'm the good-looking one.

So those are my opening comments. Thank you all for coming.

DR. ZIEMER: Well, that may be the reason you're on your way out, Lew.

MOUND PLANT SEC PETITION

The first item on our agenda today is an SEC petition dealing with the Mound facility in Ohio. Board members, in your packet -- which today, for most of you, is an electronic packet

-- you should have a letter of support from Senator Brown in your packet -- Senator Brown of Ohio. And then you also will have a copy of the presentation that will be made here by Dr. Ulsh momentarily. That should be in your packet as well.

Also you should have received in the mail earlier, or by FedEx earlier -- a couple of weeks ago -- the evaluation report from NIOSH on this petition. If you don't have a copy of that, there are hard copies on the table in back and basically Dr. Ulsh will be summarizing the findings that are given in that evaluation report by NIOSH. So at this time I'll turn the podium over to Dr. Ulsh.

Before I do that, I want to check because one of the Mound petitioners may be on the line and I want to make sure that -- it -- it would be Larry Russell, I believe, on behalf of [name redacted]. Mr. Russell, are you on the line?

MR. RUSSELL: Yes, sir, I am on the line. Can you hear me?

DR. ZIEMER: Yes, very well. And after Dr. Ulsh gives his presentation we'll be pleased to have any comments from you as well.

MR. RUSSELL: Thank you.

DR. ZIEMER: Okay. Brant --

DR. WADE: Before Brant starts, we do have a conflicted Board member, Mike Gibson. Mike, so you'll have to join the audience for this discussion.

The Board has in its own policies that if a member is conflicted on a particular site, they don't sit at the table and participate in the deliberations, discussions, motion-making and votes surrounding SEC petitions. So Mike is conflicted and therefore will not be with us at the table. Thank you.

DR. ZIEMER: However, Mike -- who essentially becomes a member of the public at this point -- could make comments as a site expert or member of the public as well.

DR. WADE: Indeed.

DR. ZIEMER: Okay. Brant?

DR. ULSH: Thank you, Dr. Ziemer. I want to take just a couple of minutes to make sure that you all can hear me. Yes, in the back?

UNIDENTIFIED: No.

DR. ULSH: That's good? Okay. I'm going to forego the --

DR. WADE: Go over the -- was that a no from the --

DR. ZIEMER: Mr. Russell, can you hear?

MR. RUSSELL: I can hear him. It's a little bit faint, but I can hear him.

DR. ZIEMER: Okay. Thank you.

DR. WADE: Okay, scream out if you lose him.

MR. RUSSELL: Okay.

DR. ULSH: Hold on. Just one second, please.

DR. ZIEMER: Okay, just stand by for a moment.

(Pause)

DR. ULSH: Okay. Thank you very much, Dr. Ziemer. I'm going to forego the podium today so that I can stand over here and mess up the computer. We're also privileged to have not only the petitioner on the line, but as you're going to find out in a minute, there were two Mound petitions and one of the petitioners is actually here in person. And I believe -- are you going to be speaking after?

UNIDENTIFIED: (Unintelligible)

DR. ZIEMER: Yes, I'm sorry, I overlooked Judy Miller. We'll be pleased to hear from you, Judy, as well.

DR. ULSH: So appreciate the effort to -- of

the petitioners to dial in and to come in person.

As Dr. Ziemer mentioned, I'm going to be talking today about the Mound site. And for those of you who have some familiarity with the DOE complex, Mound is kind of a unique site. If you think about two loose boxes you could put DOE facilities into one or the other, in the first box you might have the production-type facilities. So if you think about like maybe a Fernald or a Rocky Flats, they were primarily focused on production. On the other hand, in the other box you've got sites that were more focused on research, places like the national labs -- Los Alamos, Lawrence Livermore, those types of facilities where they focused really on basic research.

Well, Mound is a little bit unique in that they did both. They had significant production operations and they also had significant research activities, so that presents some unique challenges as we go forward here and evaluate the Mound SEC petitions.

So just to give you a little bit of an idea about what they did at Mound, the first major

mission that Mound was involved in was the production and some research involved in polonium-210, and those were used for initiators in nuclear weapons. And Mound was also involved in some research looking at alternatives to polonium-210. Polonium-210 has some undesirable characteristics for this job, and so they were looking for some alternatives, too. And they considered radium-226 and actinium-227.

Sounded like I faded out there for a second. I'm still live? Okay.

In addition, Mound did some research involved with the civilian nuclear power program, and those involved various nuclides of -- various isotopes of uranium, also protactinium-231 and plutonium-239.

Another big mission at Mound was the radioisotope thermoelectric generator, and I'm just going to call that RTG for short, it's much easier. That program involved first polonium-210, but later on also plutonium-238.

And finally Mound was involved in some research and some activities with tritium.

Now this is not meant to be an all-inclusive

list. This is simply the major programs at Mound. There were certainly many smaller programs.

In terms of the history of the Mound site, the activities were transferred from the Dayton Project, and Board members might know that better as the Monsanto site. And you recall that we had an 83.14 petition to cover the Monsanto site.

Those activities were transferred over to Mound, and that transfer was completed in 1949, and in February of 1949 the Mound site was occupied and began operation.

Production continued through 1994. Now this is a loose date. I don't want to make this a hard, bright line because the RTG program continued even after this date. It's just that in 1994 the primary focus of the site was shifted from production to D&D, decommissioning and decontamination, and that happened in '94 and continued up through 2006, loosely.

Now in terms of the SEC process for this site, we received two petitions, SEC Petition 90 and Petition 91, and we received both of those petitions in June of this year. The first

qualified in August and the second qualified in September. Upon qualification these petitions were merged, and so the initial class definition that we worked with from these two merged petitions was all employees who worked at Mound -- through the petitions it said 1949 to present. We prefer to put a definite end date on that, and so we used the earlier qualification date. So 19-- February 1949 through August 17th, 2007.

Now I want to be clear here, this might be a little confusing. This was the -- the class definition that we established at the beginning of the evaluation process. Don't take this as we're recommending a class for this or -- but this is what we considered.

Now to give you an idea of some of the other activities that have been related to the Mound site in this program, we typically use what are called Technical Basis Documents, and there are I think six of them, and together they make up a site profile. And we use those documents to tell us -- tell our dose reconstructors how to do dose reconstructions for people from those sites. And for the Mound site, the TBDs, the

Technical Basis Documents, were issued in October -- well, between March and October of 2004. And those Technical Basis Documents have been reviewed by SC&A, the Board's technical audit contractor, and they issued their draft review of that TBD in July of 2006.

We also conducted -- we, meaning NIOSH and the ORAU team, conducted outreach meetings with two of the unions active at Mound. That would be PACE and the Dayton Building and Construction Trades Council. And those meetings occurred in January of 2005.

In addition, as part of our review of this SEC petition, we conducted interviews -- at the time I made this slide it was with 21 former workers. In the intervening couple of weeks here, the past couple of weeks, we've interviewed three or four more, so we're up to about 25 workers that we have talked to.

Now this slide gives you some of the data that is available to us to conduct dose reconstruction and to assist us in our evaluation of the SEC petition. First and foremost, as with most other sites, we rely on dosimetry records. And at Mound we have a

couple of electronic databases available to us. The first is the Mound Environmental Safety and Health, or MESH, database. We also have access to the Plutonium Reconstruction, or PURECON, database. Similarly, we also have Polonium Reconstruction, that's the PORECON database. And we also have access to the paper copies of these records when they used that, in the earlier years. And I'll be talking a little bit more about some of these databases later on in the presentation. As usual, we also have a variety of technical documentation available to us, and that has been collected in the ORAU Site Research database.

And finally, we also have documentation and information provided to us by the petitioners in the petitions themselves, as well as the insights that have been provided to us by the former workers that we have interviewed.

Okay, in terms of dosimetry, as of about a month ago we had received approximately 500 cases -- 491 cases -- for dose reconstruction, and we've completed 348 of them, as of a month ago. In terms of the dosimetry that's available for those 500 cases, 420 of those

cases have internal monitoring records and 430 of them have external monitoring records.

Okay. So let's talk more about the bases of the petitions that were submitted. I've listed here on this slide -- one, two, three -- six bullets that -- that are the major concerns that were raised in the petition, the first of which was a concern that radiation monitoring of workers and of materials was haphazard.

A concern was also expressed that radioactive contaminated materials turned up where they didn't expect it to, in non-controlled -- non-radiologically-controlled areas.

The next concern was employees in non-controlled areas prohibited from receiving monitoring.

And there's some overlap in the next couple of slides for these three bullets. I'm going to talk about them and there's some overlap between them.

The last three concerns expressed were the control of Mound Laboratory documentation, destruction of records and the integrity of the radiation dose records.

So let's just walk through these. The first

concern, haphazard monitoring of radioactive material and of workers. It is certainly true that, like most other DOE sites that at least -- that operated into the '90s, Mound's operational history includes periods when the monitoring -- the bioassay program and the external monitoring -- was targeted toward those workers who were judged to have significant exposure potential. That is true. And also, through the interviews that we've conducted with former workers, we've confirmed that that is the case here at Mound as well, that -- that people with -- the workers with the highest exposure potential or significant exposure potential were targeted for the monitoring program.

We also talked to several workers who confirmed that yes, indeed, contaminated items on occasion did turn up in clean areas. And I had one RCT talk to me about how this happened, and -- and the situation that he described was, for example, complicated pieces of equipment, equipment that had inaccessible interior surfaces, they would decontaminate the outside of the equipment, send it over to the staging

facility to get rid of it, and when they started to pull that equipment apart -- lo and behold, they discovered contamination that they didn't expect to be there. So those are the -- that's one example of the kinds of situations that we're talking about. And we did find support for that concern when we talked to the workers, so we're confident that -- that that did occur.

In addition, the contractor was fined, under the Price Anderson Act, for questions related to bioassay program in the 1990s. And I want to stress here that of course a regulator-- any kind of a regulatory compliance violation is, by definition, a concern. It's -- it's an important issue. It doesn't necessarily mean that it impacts our ability to do dose reconstruction. But in this particular case, the Price Anderson Act violations that I'm talking about relate to the bioassay program at Mound. So at least in the big picture it has the potential to impact our ability to do dose reconstruction, and what I propose to the Board today is that we -- we really need to spend some more time investigating this particular

issue because it does have the potential to be important to what we do here. So that is going to be one caveat that I'm going to mention, that -- that we think this bears further investigation.

Now the concern was expressed, as I just mentioned, about the radioactively-contaminated materials in non-controlled areas, and we did confirm, through our interviews with workers, that that was indeed the case. It did happen on occasion, and not just once or twice, but periodically. However, we don't see any evidence that any significant exposures occurred, in terms of intakes of radioactive material, resulting in significant doses. And keep in mind that Mound did have a bioassay program in place. So we do think that this is an important issue, but we don't see that it impacts our ability to do dose reconstruction.

The next concern was that employees in non-controlled areas were prohibited from receiving monitoring. This -- this was kind of non-specific and -- and as I mentioned that certainly during the '90s only workers who were expected to receive an annual dose of 100

millirem were required to be monitored. So it is certainly possible -- in fact likely, I would say -- that -- that people who were not expected to receive that much dose were not part of the monitoring program. That is certainly the case.

But we didn't find any evidence that workers were inappropriately denied monitoring. And in fact, in -- in response to that situation I just described, the Price Anderson Act violations, towards the later '90s they kind of went to the other extreme, and anyone who was concerned about being exposed to anything, if they requested a bioassay, they were given that bioassay, even if, you know, they weren't judged to have exposure potential. That was kind of a reaction to that situation. So we didn't really find that workers were inappropriately denied monitoring.

Now the next issues -- the control of Mound Lab documentation, Mound would be -- if -- if you looked at a spectrum of the DOE sites, Mound would be towards the end of being very, very cautious, very, very tight with the documentation. And as an example of that, take

logbooks. Any of you who have worked in a laboratory perhaps -- oh, I keep trying to walk in front of the slides here. Anyone who has worked in a laboratory, for instance, or who was perhaps a supervisor at a DOE site, you might keep your logbooks. Well, what we find is that the Mound logbooks were -- were numbered sequentially, the pages were numbered sequentially, just like a checkbook. And these logbooks were born classified. And what I mean by that is they would order a large inventory of logbooks, sequentially numbered, and even empty logbooks, they're classified. So if I'm a researcher, I go into the -- the supply folks and I say I need a logbook and they issue it to me. That's classified, from day one. And when I fill up that logbook and I go get another logbook, that one's classified, too. So certainly there was very tight control of Mound documentation.

However, the information that we use for dose reconstruction -- and this last bullet says bioassay data; it should really say dosimetry data -- is by -- is, by nature -- it's unclassified and it is available to NIOSH.

That's the -- that's the type of data we primarily use in dose reconstruction. And it's also worth mentioning that, should we deem it important or necessary, we do have access to classified data and we have protocols established to handle that type of a situation. But the bioassay data and the external dosimetry data is what we primarily rely upon, and that is available to us.

Okay, the next concern. A lot of interest has been generated about this particular issue, and it is the records that were buried at Los Alamos National Laboratory from Mound. And we spent a lot of time investigating this, and here's what we have found out. In 1995, as part of the consolidation across the DOE complex, the classified records were collected into a couple of different locations. And some of these records -- logbooks, for instance -- turned up contaminated with radioactive material. And so in about 1995 Mound shipped 458 cubic feet of records down to Los Alamos. That -- that absolutely did happen. And before the records were shipped, though, they were inventoried at Mound by the records staff.

Once they got down to Mound (sic), they sat in less than idea circumstances in terms of preserving those records. However, right around 1995 MJW Corporation was retained to do a dose reconstruction for -- it's called a pre-1989 dose reconstruction. And MJW personnel, dose reconstructors, went down to Los Alamos and took another look at these records, and they -- they wound up pulling back I think it was 43 boxes, because they were doing a quick scan of -- of this 458 cubic feet, and anything that might have any potential value for doing a dose reconstruction, they pulled it back and sent it back to Mound so that they could take a closer look at it.

Well, once they got back to Mound and did go through those logbooks, they found some bioassay data in terms of -- think of it this way. If I was a supervisor at Mound and I've got -- I don't know, let's just say ten workers under my supervision. Periodically I'm going to get dosimetry reports on those -- on those workers, and it says, you know, Joe Worker got this many rem in this quarter. Okay. Well, if it's of note, if it's, you know, particularly

high dose or particularly interesting dose or -- for any reason, I might write it in my logbook, Joe's got two rem, got to be careful so he doesn't exceed limits. There were things like that in the-- in these logbooks. That's just an example.

But what MJW found was that all of the bioassay data that was in these logbooks was al-- already available in records that had been microfiched at Mound. So they didn't find anything that, had they not pulled it back and had it been buried, that would have impacted their ability to do a dose reconstruction. Nevertheless, these logbooks that they pulled back, they had them scanned. They were part of the A-basement* consolidation. They scanned these records and those records were then sent to Austin for safekeeping, so those are available.

Once that was done, once they had been scanned, those records that they had pulled back were sent to NTS for disposal and they were disposed of. The records down at Los Alamos were also disposed of. So while it is certainly true that records were disposed of, that's not

unusual. I mean they -- the DOE disposed of a lot of records because, quite frankly, they had guidelines about what they had to retain and what they didn't, and these were not dosimetry records so they didn't have to retain them.

So what were they, exactly. Well, they included production records. They included industrial X-rays, accounting records and some laboratory logbooks. Here is the bullet about MJW retrieving the 43 boxes, and again, the important point is that they found that the data that was in those logbooks was already available in other Mound documentation, so it's not the primary dosimetry information.

Okay, lastly, the concern was raised about the integrity of radiation dose records. And what I can tell you here is that as part of the MJW dose reconstruction project, they looked at the PURECON database. That, as you might guess from the name, contains the plutonium bioassay data. They looked at 100 percent of that entire database. They looked at all of them. And they found about what you would expect in a database -- error rates in the single-digit percentages, maybe five percent, I don't

remember the exact number, but they corrected those. So it was pretty typical for, you know, clerical type errors, and those were corrected. In addition, MJW created the PORECON database, and they did that with double-key data entry and they QA'd that extensively, and that is very well documented. So we have a lot of confidence in the integrity of -- of that data. And in fact, we didn't really identify any problems with the integrity of the dosimetry data available at Mound.

So that brings us to the end of the concerns that were raised in the petition, and we issued our evaluation report, as Dr. Ziemer mentioned, in December of last year, just a couple of weeks ago.

And now I'd like to talk to you, though, about an issue that wasn't raised explicitly in the SEC petitions, but it was raised in more than one -- several -- of the interviews that we conducted with former workers. And that involves the operations that were conducted at Mound from very early, October of 1949, and spanned the next ten years up to 1959, and that is the separation of radium-226, actinium-227

and thorium-228. The source materials for this operation were K-65 residues -- Board members, you might be familiar with that; we've talked about it in other contexts -- and also irradiated radium.

Now these operations were conducted in what's variously known as the old cave. It's also been called the radium cave. Officially it's SW-19. And I -- I'm paraphrasing one of the old-timers that we interviewed. He said that was just a nasty, nasty operation. And we -- we like to -- at least the interviews that I'm involved with, when we talk to the workers I like my last question to be okay, we've asked you about a number of issues; is there anything that we haven't asked you about that you think would be important in terms of our ability to do dose reconstruction, something that we should have asked you about and didn't. And that's the context in which this came up, the worker mentioned it.

And so we spent some time evaluating this. And what we found, for example -- we looked at some health physics progress reports. I don't remember if they were monthly, but they were

periodic progress reports, and we found language in there that that indicated to us that the contamination was not confined to SW-19, the old cave, but in fact it was spread throughout R and SW buildings. We also know that some other buildings were involved in research to support this project, although I can't really tell you the extent of that. And we've seen air data for this. Now I can't really go into the details about the pedigree of that air data, but let's just say that it was sufficient to indicate to me that there was pretty significant airborne potential. And we also have a very limited number of bioassay data for this operation, radium, actinium and thorium. However, as MJW noted, there are a lot of problems with interpreting this bioassay. In some cases it wasn't associated with a particular worker. In some cases it didn't have units on it. You had to assume the age of the material when that wasn't specified. And so there's just a lot of problems that we felt would not allow us to put a sufficient upper bound -- sufficiently accurate upper bound on the internal doses from this

particular operation.
And therefore we concluded that reconstruction of internal doses from these three radionuclides -- radium-226, actinium-227 and thorium-228 -- is not feasible. And the period that that covers is from the time the material arrived on site until the completion of D&D of the old cave. And we know the month that that happened. We know that it arrived on site in October of '49 and we know that D&D was completed in February of '59 -- don't know the exact date, so we're taking the broadest scope here and just saying October 1st, '49 through February 28th, '59.
We have concluded, however, that reconstruction of internal doses is feasible from 1959 forward, and I've -- I've put here 1990, with that weird symbol that means sort of about 1990, and that's because of that caveat that I mentioned early -- earlier, the concerns that we have about the situation that led to the Price Anderson Act violations, and those were related specifically to the bioassay program. And I'm not prepared to stand here today that -- one way or the other, that yes, we can do

dose reconstruction, or no, those issues are not important. What I propose to you -- we have the documentation in hand, it's about 2,200 pages, and we are speedily reviewing that now. What I propose to you is that we report back -- I come back and report to you, Board members, on what we find as we work through that material.

We did find -- we did conclude that reconstruction of external doses is feasible for all years.

Okay, Board members will recognize this slide, I think it's in every SEC petition, it's the standard two-pronged test. For those of you who are not as familiar with it, we have -- in terms of deciding whether or not to recommend an SEC class, there's what we call a two-pronged test. And the first prong, the first question that we have to answer, is is it feasible to estimate the level of radiation doses that a class could have received with sufficient accuracy. Well -- and then if the answer to that question is no, it's not feasible, then we have to proceed to the second question, and that is is there a reasonable

likelihood that health was endangered.
So our evaluation of the SEC petition for Mound, through that two-pronged test, we recommend -- NIOSH recommends addition of an SEC class at Mound that consists of all workers on site -- because again, we can't really say who might have been walking through R and SW buildings, whether or not they were monitored, so we don't really think it's feasible to try to limit this class more specifically than just everyone who worked on site during the time period of October 1st, 1949 through February 28th, 1959.
And so, to summarize, you see the first row there on this last slide, the table, we do recommend a class from '49 to '59 for internal doses from those three radionuclides that we talked about. Feasibility, no; we've concluded that it is not feasible to bound doses for these folks. And yes, we've concluded there is a reasonable probability that their health was endangered from that operation.
However, from '49 forward we are not propo-- we -- we have concluded that we can do internal doses from all other radionuclides, with the

possible exception -- an issue that we want to investigate further, and that's related to the D&D program, about 1990 into the D&-- into the later years. It might be 1980s, late '80s -- again, it's not a bright line when they started doing D&D, but it certainly ramped up in the early 90s.

And finally, we've concluded that we can do external for all years.

So I believe that is my last slide -- yes, it is. I would be happy to entertain any questions.

DR. ZIEMER: So Brant, is it true then that your recommendation is basically saying that this open issue on the Price Anderson issue does not affect your recommendation on the early years at all --

DR. ULSH: Oh, no, no.

DR. ZIEMER: -- so that part, from '49 to '59, on -- on the internal dose from radium, actinium and thorium, still stands, and the 1949 to about '90 period, depending on the outcome of that --

DR. ULSH: Right.

DR. ZIEMER: -- you're saying you can

reconstruct doses --

DR. ULSH: Correct.

DR. ZIEMER: -- except the -- that part is fuzzy.

DR. ULSH: Yeah, the end date -- the 1990 year there is very approximate. I think that the Price Anderson Act violations dealt with incidents that occurred in -- 1992, does that sound right? I'm -- I'm looking at the back of the room to the conflicted Board member. Right around there, right around 1992-ish, but it wasn't only that -- okay, let me go into a little bit more detail perhaps.

DR. ZIEMER: Well, the --

DR. ULSH: Or not.

DR. ZIEMER: -- the only -- the point of my question is if the Board wished to take action on the early period --

DR. ULSH: Yes.

DR. ZIEMER: -- then we would expect at some point there would be a later action that would clarify this other issue and we could determine what to do at some other time on the later time period.

DR. ULSH: That's exactly what I'm

recommending, yes.

DR. ZIEMER: I -- I see, okay. Josie I think has a question.

MS. BEACH: Yeah, I have two questions actually. The first one is on the actin-- actinium-227. In 1964 190 milligrams of actinium was processed in the new cave. Does -- does NIOSH have the bio data for that time frame?

DR. ULSH: You know, Josie, I would have to go back and look and see. I know that I've got a spreadsheet back at the office that tells me the bioassay data for all of those things. You said 1964 in the new cave?

MS. BEACH: That's correct.

DR. ULSH: Yeah. The -- I would have to check into that a little bit more and get back to you with more details on that. I can tell you that the new cave contained a hot cell, and I talked to a couple of the guys who were working in the hot cell, and what that typically is and what it was in the new cave is the facility where -- you put the material inside, and it's shielded by several inches of -- of leaded glass to shield you from the external doses, and it's

got remote manipulators. And I specifically asked one of the guys -- one of the former workers, I said okay, when I think of a hot cell I think of a totally isolated environment; is that what we're talking about here? And he said oh, yeah, yeah, that's what we're talking about. So if they -- I still have to -- my answer to you is I've got to check into that and get back some more details for you, but keep in mind that it was inside a hot cell, so...

MS. BEACH: And then my second question is, in your evaluation report on Table 6.64, PURECON -- Pu records summary, 19 -- let me see, the year 1965 had 300 -- or 3,632 records, 1966 only had 11, and then it jumps back up to 3,718 in 1967, and then again in 1991 there was only one record. I was just wondering why that was.

DR. ULSH: Good question. I'm going to have to give you the same answer there. I'll check into that and get back to you.

MS. BEACH: Thank you.

DR. ULSH: Sure.

DR. ZIEMER: Is that on Table 6-6?

MS. BEACH: 6-4.

DR. ZIEMER: Oh, 6-4.

MS. BEACH: Page 39.

DR. ZIEMER: Mark?

MR. GRIFFON: Ask an easier question first.

DR. ULSH: That would be good.

MR. GRIFFON: On the cutoff, the February 28th, '58, whatev-- '59 --

DR. ULSH: Yeah.

MR. GRIFFON: -- the cutoff when the cave was deconned, you mentioned in your presentation that the contam-- the R and SW building -- entire building had some contamination. I -- I believe they probably D&D'd the cave itself, but not the rest of the building, and yet you're, you know, excluding the time from -- you know, you're cutting it off at that point. What -- you know, how do you --

DR. ULSH: Right. Well, first of all, it wasn't the entire building. It was several areas of the building, so I wouldn't want to speculate on what -- where there might not be radiation. As I understand it, though, they did do D&D -- they did clean up --

MR. GRIFFON: All the various areas?

DR. ULSH: Yeah. I would have to give you more

details, though, about, you know, what types of sampling --

MR. GRIFFON: Right.

DR. ULSH: -- and characterization plans, that was -- that's a bit more detailed that we went into here.

MR. GRIFFON: Okay.

DR. ZIEMER: Brad Clawson.

MR. CLAWSON: I'm trying to understand, after 1959 what makes it so that now you think that you can do the internal dose. What -- what has changed in the process?

DR. ULSH: Well, the -- the cutoff date, Brad, was the end of that particular project that we found problematic, the radium, actinium, thorium separations. That ended with the D&D of the old cave, and that was completed in February of '59. So they really weren't doing much, with the possible exception of what Josie just asked about, with this particular material after that. And we have bioassay data for the other programs -- you know, the polonium, the plutonium, thorium -- we have bioassay data for that that we think is sufficient to do dose reconstruction.

MR. CLAWSON: So up to 1959, that -- that incorporated the decon of the facility --

DR. ULSH: Yes.

MR. CLAWSON: -- and the hot cell that they were working on and --

DR. ULSH: Well, now Josie mentioned the new cave. Don't confuse that --

MR. CLAWSON: In --

DR. ULSH: -- with the old cave.

MR. CLAWSON: In 64.

DR. ULSH: Yeah. Those are two separate facilities. There's the old cave, the radium cave, where they did this radium, actinium, thorium separation. Then they D&D'd that and they actually abandoned that facility and they established the new cave, and the new cave is where they had the hot cell, and that's -- they did some operations in there throughout the later years, into the '60s and '70s, so those are two separate places. They've very close together, but they're separate rooms -- separate...

MR. CLAWSON: So when you're saying that it's deconned, that facility is done away with or was just cleaned up, it was just -- and still

sat there?

DR. ULSH: Well, it was cleaned up, but keep in mind, Brad, this is the '50s, so --

MR. CLAWSON: Right.

DR. ULSH: -- their standards were a bit different than the standards we might think of when we D&D today.

MR. CLAWSON: Well --

DR. ULSH: But the -- there were no operations going on in the old cave after that date --

MR. CLAWSON: I understand that, and -- and dealing with thorium, so forth and everything else like that, I guess kind of what I'm wondering about is down the road in the -- the D&D era when they got back into that facility, were they -- were they monitoring for these things better? See, the point I'm trying to get is when they get in there and they start to decon this and they've got what we call legacy problems in there, we're digging up memories. Okay?

DR. ULSH: Right.

MR. CLAWSON: And -- and are we going to be able to monitor the people later on in their date for this?

DR. ULSH: Well, in fact you raise a very good question, and this is what I was going to go into a little bit more detail on. I mentioned to you the Price Anderson Act violations in the '90s related to the bioassay during the D&D era -- well, actually -- and Mark, now that I think about it, this relates a little bit to your question, perhaps -- a situation was brought to our attention by a former worker that we interviewed and discussed with several others about a particular job that was done in the R building. The R corridor 5, I believe, they were D&D-ing it and they ran into -- unexpectedly, I guess -- actinium. And as I understand it, this is one of the incidents that led to the Price Anderson Act violation, although it wasn't the only one. They took bioassay samples on those folks, but they didn't analyze them promptly. And so that kind of piques my interest in terms of ability to do a dose reconstruction. It -- it -- I would say that that fits your description of a legacy problem, yeah, absolutely. I think that's the nature of the concerns that led to the Price Anderson Act violations in the '90s, and I

think that certainly warrants further -- further scrutiny.

DR. ZIEMER: Thank you. Other comments or questions from the Board? Okay.

MR. GRIFFON: I got -- this is changing the topic a little bit, but on -- on page 13, Brant, I think -- I think this -- well, I'll ask if it was a typo, but you -- you mentioned on your slide on page 13, I don't know if you can find it, under 10 CFR 835 -- it started off with a discussion of 835, monitoring would have been required for potential exposures, something like that. In the statement it said NIOSH found no evidence that workers were inappropriately denied external monitoring. I think you said denied any -- denied external or internal. Right?

DR. ULSH: You know, actually, Mark, I did that -- that's not a typo.

MR. GRIFFON: Oh, okay. I just wasn't sure.

DR. ULSH: We didn't find the workers were denied external monitoring, but this --

MR. GRIFFON: How about --

DR. ULSH: -- caveat that we're talking about --

MR. GRIFFON: -- how about internal -- okay, okay.

DR. ULSH: -- this caveat that we're talking about here, did they appropriately monitor the D&D workers for the materials they might have been exposed to, I've got some concerns.

DR. ZIEMER: Thank you. Okay. Now there were actually originally two petitions, you remember, petition --

DR. ULSH: Yes, 90 and --

DR. ZIEMER: -- 00090 and 00091.

DR. ULSH: Right.

DR. ZIEMER: [name redacted] is one of the petitioners for 00090 and Judy Miller is the lead petitioner for 00091, and we have [name redacted] on the phone, Larry -- or is it -- yeah, I think it -- it's Larry who -- Russell, and Larry, did you have a statement -- and let me tell -- tell you that -- Larry, your communication to the Board dated December 29th has been distributed to the Board members. I believe everybody got that. But did you have some additional comments?

MR. RUSSELL: Yes, I'd like to make some brief comments about this.

DR. ZIEMER: Thank you. Proceed.

MR. RUSSELL: Again, my name is Larry Russell. I'm the [identifying information redacted], who did file SEC 00090 petition, which was merged with 91. I want to let the Board know we were not able to attend this meeting of the Board due to the location and the shortness of notice, which we weren't really informed of the meeting until December 21st, '07.

This petition was filed regarding her employment at the Mound Lab. [name redacted] was there from 19-- September 1965 through April 2001. In 2005 [identifying information redacted]. In a letter that we received dated December 15th, 2007 from the U.S. Department of Labor, District Cleveland Office, they have recommended acceptance of her claim for [identifying information redacted], and we're still awaiting word of how they're going to proceed on that. It's our understanding right now that no decisions has been made in regard to [identifying information redacted].

We have some concerns about the SEC petition evaluation report which was dated December 21st. One I think that I heard a lot was

availability of employee health records, which you know included X-rays, TLD readings, et cetera. We would like to stress, though, that the monitoring procedures of each of the operating contractors varied dramatically, and there were at least six different contractors that [name redacted] worked under the time she was at Mound. Many workers that worked there asked to be monitored but, depending on the contractor and where they worked, they were not allowed to be monitored, which I find alarming. When someone thinks they need to be monitored and it's done -- and I'm sure it was done for budgets -- reasons, we have a concern about the MORE records system. A lot of people we talked to said it was flawed by backlog and a lot of records never really got inputted (sic). It was designed poorly and most supervisors considered it pretty worthless. And I'm again quoting the people we've talked to.

I'm concerned, and [name redacted] is, about the SEC report relying on interviews, but I did hear today that there has been a big attempt to go back and look at, you know, written documentation, specific documents, and I'm glad

that they do have some kind of database to -- that they can look at some of these records. But again I think the key thing is what about the records who were not -- for the employees who were not monitored during this process. I also want to let you know that -- and you may be aware of this -- anyone who retired from the Mound, as part of their retirement, can purchase health insurance benefits, which [name redacted] did. But the health insurance policy has a lifetime benefit of $250,000. [identifying information redacted]. We're asking that the Board not accept the petition evaluation report and ask for more detailed information. I think it's essential the Board have factual data. Interviews with former Mound people I think are good, and I think that effort is commendable that it was done, but we're going to -- we're asking that the Board table this issue and seek more information before any final determination is made. And I would -- on behalf of [name redacted], I would like to thank you for the opportunity to provide this input to you on this important issue for not only her, but all Mound workers.

Thank you.

DR. ZIEMER: Okay, thank you very much, Mr. Russell.

Now we'll hear from Judy Miller. Judy, we'd be pleased to have your comments at this time.

MS. MILLER: Can I do this? Hello, my name is Judy Miller and I am the daughter of Mary Ann Miller, who worked at Mound from 1956 to 1983. She couldn't be with us here today. She passed away on December the 25th of '05, which was quite unexpected.

But I would like to introduce you to my mom and show you brief little snippets of her life and her friends and her loved ones, and [name redacted] has been kind enough to help me technically, so if you would, please, just sort of -- this is my mom and -- and this was just a little bit of our lives together.

(Whereupon, a slide show was presented.)

Thank you for allowing me to share that with you. I would like to just tell her story, if I may.

I was born in 1949, and I moved to Miamisburg, Ohio and we lived south of the Mound Plant next to the river. And Mom went to work at the

Mound in 1956 and I went to Our Lady of Good Hope in 1956. She was a very conscientious worker and she received numerous awards for her attendance, and she was an excellent mother and she was a wonderful friend.

She became ill in the '60s, and her attendance of course started falling off and she had various forms of different illnesses. In 1970 she was diagnosed with leukemia. They didn't give a specific type, but they just diagnosed her with leukemia. She was also diagnosed with COPD, which resulted in her retirement, her disability retirement in 1983. She -- the leukemia maintained itself and she developed numerous illnesses and infections and in and out of the hospital for the rest of her life.

She worked in B building, in the Lab. She worked with [name redacted], who is also one of the petitioners, and she was there in the -- [name redacted], who is also a petitioner, also worked at the Mound. [name redacted] has been diagnosed with breast cancer and has been hopefully successfully treated.

My mother filed the EEOICP when it came into law. She was denied. And at that point that's

when I became involved and I began helping her with it. At that time her illness was really starting to take its toll so I helped her with it and we managed to get a specific diagnosis of the leukemia, which is CML. And as I understand now, that is -- the only reason that you would have CML with the mutation of your chromosomes is because of radiation exposure. She was awarded her claim under the E portion of EEOICPA. She was granted a minimum of -- a minimum amount, because it wasn't a whole body impairment. She received $165,000, which of course she did know that she received, and for that I am very grateful.

The CML was denied again, and we appealed it again, and I can't even begin to tell you how many times. However, she -- that was -- that was one of the causes of her death on Christmas Day. She was 91 pounds. She was covered with sores that would not heal. And as you can see, she was a very beautiful woman, very full of life. Although her illness did incapacitate her in different ways, she still managed to -- to show us a wonderful life and to do the best she could. And I am imploring you to recommend

that the Mound become a Special Exposure Cohort because I feel very passionately that the Mound contributed to her death. And in fact, one of these days may contribute to mine.

As I stated, I lived south of the Mound Plant in what was a little neighborhood called Komen* Plat. And I have a water analysis from that area which was done in 1991, and we had wells for our water. And there was traces of plutonium-238, and I have a hard time with this, titrinium (sic), but there was also a measurable amount in the water. We lived there until 1959.

My father passed away with lung cancer. [name redacted] has had numerous illnesses that were -- have been unable to be diagnosed. The doctors just don't know. I have my own set of illnesses. And my friend [name redacted], who was kind enough to come here with me, he -- his family has also -- his parents didn't work there, but they lived down the hill from Mound and he has lost two very close family members with illnesses that were not ordinary.

And there's numerous people in Miamisburg that have been affected by the Mound. I know that

it was a -- it was a wonderful place to work. When my mother and my aunts were there they were very grateful to have that type of position and were very proud to be there. But the fact that it did cause their illness -- she was a perfectly healthy, 26-year-old woman when she went there, and all of her medical records point to that. The Mound was in a very close proximity to all of the residents. I feel that they have destroyed my town. I no longer want to go back there, for my own health and for my own children's health. And I would again plead with the Advisory Board to rectify this atrocity, and I -- that's what I believe that it is. It was so incomprehensible that our government could put that many people at risk and not seemingly care for the damage that it was done to the families and to the lives -- not only to the workers, but to the residents and the people who lived there and loved the town.

I'll -- I will close with the fact that I think that NIOSH may have a very valuable piece in this puzzle. However, I don't believe that they have all of the information, nor do I

believe that they can complete the dose reconstructions that would be favorable to the claimants. And I would passionately plead with the Advisory Board to recommend that the entire facility give some relief to the workers and to the survivors of that plant.

That's pretty much all I have to say, and thank you for allowing me to speak on behalf of my mom. And just one bright note, we do have a new family member and she was born a few months after my mother died, and she was named after my mom, so we have [name redacted] to take Mom's place. So again, thank you for your time.

DR. ZIEMER: Okay, thank you very much. I mentioned earlier we have a letter from Senator Brown, and we're going to have that letter read into the record. So Jason, if you'll come now and, for the record, read the letter from Senator Brown of Ohio.

MR. BROEHM: Yes, I'll do that. It's a letter from Senator Sherrod Brown, United States Senator from Ohio. Dear Dr. Ziemer, I write to express my support for the Special Exposure Cohort status number 0090 petition filed for

the former employees and their survivors of the Mound Plant.

Workers at the Mound Plant in Miamisburg, Ohio were involved with top secret defense research that produced nuclear materials and technology. The work often required handling poisonous and radioactive materials, and as a result workers were sometimes unknowingly exposed to dangerous levels of toxins. The Energy Employees Compensation Program was created to compensate Energy workers and their survivors for the illnesses that resulted from these exposures.

In September the Senate's Health, Education, Labor, and Pensions Committee held a hearing on the effectiveness of the EEOICP. Throughout the hearing both claimants and program administrators noted how the lack of available information prevents full and accurate dose reconstructions. This testimony was further substantiated by a GAO report released shortly after this hearing which cited "unavailable or incomplete radiation monitoring records" as a reason for the increased program costs.

Individual claimants are experiencing this same lack of information, but do not have the

federal resources at their disposal to overcome the obstacle.

The lack of available information is particularly troublesome because it is the claimants' responsibility to demonstrate exposure levels and prove the relationship between exposure and illness. The inability of claimants to reconstruct exposure levels because of incomplete, in accurate and sometimes classified information, coupled with the obligation of claimants to adequately meet the burden of proof, creates an unjust system that defies the true purpose of the EEOICP.

It is my understanding that NIOSH is submitting an SEC Petition Evaluation Report recommending that SEC status be granted only to employees that worked at Mound for a specific period of time. I encourage the Advisory Board to extend SEC status to all Mound workers, from 1949 to present. The current administration of the EEOICP does not allow for fair adjudication of Mound dose reconstructions and granting SEC status to all Mound workers will better adhere to the true intentions of EEOICP.

I encourage the Advisory Board to make a prompt

decision in favor of granting full SEC status to all of Mound's workers, past and present. I think the Board for its attention to this matter and its serious consideration of SEC Petition Number 0090.

DR. ZIEMER: Thank you very much. Just earlier today we were -- a letter was delivered to the Board, a letter dated January 8th, from a former Mound employee who I believe lives in this area now. That is [name redacted]. He's a retired engineer with 57 years experience. Board members, we made copies of this and distributed that so you -- you should have that in your file as well. I don't know that we need to read that into the record, but -- he didn't ask that it be read but that it be made available to the Board members so we have done that as well. And basically he is also speaking for approval of the SEC petition. Okay, Board members, this recommendation from NIOSH now is open for discussion. Dr. Melius.

DR. MELIUS: Refresh my memory, but I don't believe we have a working group on Mound.

DR. ZIEMER: We do not have a working group on Mound.

DR. MELIUS: Yeah, and I believe we have a site profile review, though, done by SC&A some time ago?

DR. ZIEMER: We do have a site profile review, that's correct.

DR. MELIUS: Yeah, so I mean certainly re-- re-- regardless of our actions on this particular petition today, I would certainly think that it's in order that we need to get a -- a group together that can follow up on the SEC and deal with the site profile, also, so --

DR. ZIEMER: There appear to be some open issues on at least some of the time frames. And I might add as an observation that, should the Board decide to recommend approval of -- of this action that NIOSH has recommended, that does not preclude later actions on other parts of the workgroup there at NIOSH. I think one of the petitioners -- I think the -- Mr. Russell I think it was that recommended that we take no action at this time. I might point out that taking action as NIOSH has recommended would actually put at least part of the working group into an SEC class. It would not preclude action on other parts of that later. Did you

have additional quest-- okay. Other comments or questions? Yes, Josie.

MS. BEACH: I just have one question on the '49 to '59 time frame. Who would be involved in that class? Would it -- which group of individuals?

DR. WADE: Brant is coming.

DR. ULSH: Josie, that would certainly be, you know, the Board's prerogative to -- to recommend as they see fit. But the NIOSH recommendation is that that include everyone on site during those two time periods.

MS. BEACH: Thank you.

DR. ULSH: Presuming they meet the other requirements of the SEC -- you know, 250 days and -- and all that.

DR. MELIUS: And what? What I'm trying to get -- I'm just trying to pin down what is the exact definition that you're recommending. Is it what's in the report?

DR. ULSH: Yes, it's what's in the report.

DR. MELIUS: Oh, okay, okay.

DR. ZIEMER: As I understood the report, you could not exclude anyone on the site during that time period from having been exposed in

those facilities. Was that not correct? As I understood what you --

DR. ULSH: Sorry, Dr. Ziemer, could you repeat that?

DR. ZIEMER: Even though there were specific individuals who were involved in this radium, actinium, thorium work, as I understood the -- the evaluation, you were not able to exclude other workers from having access to those areas and therefore they -- all workers become eligible --

DR. ULSH: That's correct.

DR. ZIEMER: -- if they were on the site during that period. Is that correct?

DR. ULSH: That -- that's what we're recommending.

DR. ZIEMER: Yes.

DR. ULSH: It has been pointed out to me just now that our definition doesn't say anything about the 250-day requirement or -- so we might have to adjust that so that it's in the standard format, you know, the 250 days and --

DR. ZIEMER: Well, I think the -- the issue of -- of health endangerment included the 250 days by -- in your discussion, at least, it was --

DR. WADE: Yeah, I think it's -- it'd be better if you gave us those words precisely.

DR. ZIEMER: It may not have been there in that definition, but it is in your discussion in health endangerment. It is -- it is discussed in the report --

DR. ULSH: Okay.

DR. ZIEMER: -- that that's your standard measure if -- if you're --

DR. ULSH: Correct.

DR. ZIEMER: -- unable to reconstruct dose, the presence for 250 days --

DR. WADE: I think it would serve the Board for you to give the Board precise wording of what you --

DR. ZIEMER: Yeah, Wanda Munn.

MS. MUNN: Just puzzling a little bit over the categories that a -- a category that is not specifically called out here, which is '49 through '59, it -- it appears, just from an observation here, that the second item on the summary, the '49 through 1990, internal from all others, would -- really should say 1959 through 1990, as is the case from the last item as well since -- if I understood what just was

said -- everybody on site from '49 through '59 -- we can't identify whether they were exposed --

DR. ZIEMER: Yes, but keep in mind this goes to the question of the non-compensable cancers under the SEC, the question of can you reconstruct other doses in the '49 to '59 time period, and NIOSH is saying yes, we can do others so that if a person has one of the other cancers that's not compensable under the SEC -- 'cause the SEC does not include all the cancers -- then they could go back for a dose reconstruction -- a partial dose reconstruction for the other nuclides.

MS. MUNN: But that's the confusion in my mind. How can they exclude the potential of radium, actinium and thorium from the exposure that those individuals would have received?

DR. WADE: I think NIOSH is saying that it cannot reconstruct dose for those exposures.

MS. MUNN: Exactly. And since we cannot identify who were involved in those exposures, then it's diffi-- I'm trying to understand how anyone then, SEC or -- SEC-covered cancers or not, can be appropriately viewed from '49

through '59 if you can't say they were or were not exposed to these three.

DR. WADE: The word "appropriate" we need to talk about. NIOSH is saying that it cannot reconstruct dose for those exposures from '49 to '59. It is saying it can reconstruct internal dose for other exposures. The concern now are those individuals potentially disenfranchised by the SEC who have non-covered cancers. NIOSH would like to attempt a partial dose reconstruction, which would include external dose and internal dose from those radionuclides for which NIOSH could reconstruct internal dose, in the hopes of reaching a compensation decision.

DR. ZIEMER: And I think we have the same dilemma in every SEC, Wanda, because in essence if someone has a non-compensable cancer under the SEC -- has one of the other cancers and comes for dose reconstruction, you have no way of giving them credit for exposures to these three nuclides. They -- they don't, in essence, get credit for that because we can't reconstruct dose. So the question then is well, did they get enough dose from other

things to be compensable now. And I hope all -- all petitioners realize that there's a trade-off between the SECs. On the SECs not as many cancers are covered, so this is an attempt to keep the door open, for those whose cancers aren't covered under an SEC, to have an alternate sort of backup that says yes, we can still reconstruct other doses so we will try to do that for you if you have a -- one of the other cancers that's not on -- on the -- on the list. But I think we have the same situation for every SEC, as I -- and maybe -- maybe Larry or Jim Neton can --

MS. MUNN: Well, I --

DR. ZIEMER: -- clarify. Did I explain that correctly?

MS. MUNN: I believe what is really underneath those words is an individual whose probability of causation can be shown to be more than 50 percent, without taking into account the radium, actinium and thorium --

DR. ZIEMER: Exactly, that's correct.

MS. MUNN: -- would in fact --

DR. ZIEMER: That's correct.

MS. MUNN: -- be covered --

DR. ZIEMER: Exactly.

MS. MUNN: -- it could be done.

DR. ZIEMER: They're still eligible for compensation under dose reconstruction if they --

MS. MUNN: Just wanted to clarify that.

DR. ZIEMER: Yes.

MS. MUNN: Thank you.

DR. ZIEMER: Okay. Other comments?

(No responses)

Board members, if -- we have a couple of paths forward, one of which would be a recommendation to accept the NIOSH recommendation to declare this subset, as I'll call it, a class and -- and to also -- and I think Jim's question suggested this -- and to also establish a workgroup and ask that workgroup to work with NIOSH and our contractor to deal with the open issues that remain, and any other related issues.

Keep in mind, Board members only got this document in the last two weeks, and this is a fairly extensive review and there's an extensive amount of backup material. I have read through it, but I must tell you that if --

if one wants to dig into Mound, there's a lot of material there that we need to look at. And it would seem to the Chair it would be appropriate to, in a sense, keep the door open and allow us to look at this report in more detail. You may wish to even delay action on the -- on the subset, but if you're -- if you're comfortable with that part of it today, if you think NIOSH has made the case that they can't reconstruct dose -- I think the Board always has to look at both sides of this; do we accept outright that they really can't do it, have they -- you know, have they dug into all the records and can they really not do that, that's the other side of the question, so -- okay.

Jim, you have another comment, and --

DR. MELIUS: Yeah --

DR. ZIEMER: -- then Josie.

DR. MELIUS: -- one -- number one, I mean I'm satisfied that they can't do it. And given -- you -- and I'm -- I am a little bit uncomfortable with the fact that we -- we haven't had a workgroup established and we just got this report and it is a large facility and

-- and fairly complicated and a lot of issues to go over. However, given that, you know, this is a -- I think a relatively straightforward class definition, we're not worried about trying to figure out which buildings and -- and things like that as much, I -- I'm comfortable with going ahead with, you know, granting the class for the -- that one early group and then, as you said, Dr. Ziemer, let's establish a workgroup and -- and pursue the -- the other issues within the report and on -- on the site.

DR. WADE: Would it be the Board's pleasure to wait for a clarification on the wording from NIOSH, or to vote based upon what it has now?

DR. MELIUS: What I was going to propose was sort of a sense of the Board that we go ahead. We'll get a definition and then I can draft up a letter and --

DR. ZIEMER: Let me hold off and see if there's --

DR. MELIUS: Yeah.

DR. ZIEMER: -- additional comments here and then we'll op-- we'll ask for a specific motion. Josie?

MS. BEACH: I just have -- from my question for Brant earlier, the actinium in 1964, I guess I want it clarified, would -- could -- could there have been exposure during that time period, and I wanted that answered first.

DR. ZIEMER: Before we act on this.

MS. BEACH: If it feels like there's an issue there.

DR. ZIEMER: Well, I guess my question would be even if there were, would that affect this early period? I mean the early period is --

MS. BEACH: I guess I was thinking maybe that should extend it, but possib-- you're probably right. That's isolated --

DR. ZIEMER: It could always be extended.

MS. BEACH: But it's just isolated for '64, so you're -- you're probably right, it wouldn't.

DR. WADE: I think the workgroup could look into whether it should be extended or not.

MS. BEACH: Okay.

DR. ZIEMER: Mr. Presley.

MR. PRESLEY: I have -- well, Wanda had hers up before I did --

MS. MUNN: No, go ahead, Bob.

MR. PRESLEY: (Off microphone) (Unintelligible)

Jim 100 percent. I don't think that -- that holding off on this -- voting on this SEC -- portion of this SEC (unintelligible) will hurt one thing and it might get some of these cases adjudicated down the road, so I would like to see this Board vote on the petition, or the part -- part of the petition.

DR. ZIEMER: Wanda?

MS. MUNN: I'm prepared to make a motion that we go forward with the recommendation for the years 1949 through '59 as SEC for the entire site.

DR. ZIEMER: Okay, I'll recognize that as a motion, with the caveat that I will ask for a follow-up motion after the voting is completed for the next steps on the rest of the petition. And the other caveat will be that -- that the motion, if it is passed, will be put in formal, structured wording that will be of the type that we forward to the Secretary of Health and Human Services and -- and that that formal wording will be available to the Board on Fri-- I think Thursday, perhaps. I think everybody's going to be gone Friday.

DR. WADE: Oh, I'm sorry, we -- I'm missing a

day -- it's the last day of the meeting.

DR. MELIUS: I guess then we'll still be here, we'll --

DR. WADE: Thursday, sorry.

DR. ZIEMER: Yeah.

MS. MUNN: That language of course to incorporate --

DR. ZIEMER: Right.

MS. MUNN: -- the necessary caveats that were mentioned --

DR. ZIEMER: Okay, so we have the motion and the second. Is there further discussion?

The motion then would be to accept NIOSH's recommendation that the early group -- seconded by Presley -- the early group, '49 to '59, as described in the NIOSH evaluation report, be granted Special Exposure Cohort status, or be named as a class in the Special Exposure Cohort -- and this -- and again I point out that this does not preclude later action on the rest of the time period, so -- but that is the motion right at the moment. Is there discussion on that?

And again, that includes basically all buildings and all workers, even though it looks

restricted for those three nuclides, the actual definition includes all buildings, all workers at that site for that time period.

MR. PRESLEY: Put that in the motion.

DR. ZIEMER: That will be in there. And there will also be the 250-day requirement as well. Board members, are you ready to vote or...

DR. ROESSLER: Paul, this is Gen Roessler.

MR. PRESLEY: That's Gen.

DR. ZIEMER: Gen Roessler, are you on the line?

DR. ROESSLER: I'm on the line, I just wanted to let you know I'm here and I would like to vote when the time comes.

DR. ZIEMER: Okay, we certainly want you to vote, Dr. Roessler. Also the courtesy -- Mr. Russell, if you're still on the line, you had recommended that we not take any action. You understand that this action would not preclude action on the rest of the petition but would give the early group a kind of head start, as it were, in being recognized as part of the SEC.

MR. RUSSELL: Yes, I'm in favor of that very much. I didn't mean to not -- prevent that from going through 'cause I think that should

go through.

DR. ZIEMER: Okay.

MR. RUSSELL: Thank you.

DR. ZIEMER: Any other comments or questions?

(No responses)

If not, we'll take a roll call vote.

DR. WADE: Brad Clawson?

MR. CLAWSON: Yes.

DR. WADE: Wanda Munn?

MS. MUNN: Yes.

DR. WADE: Jim Melius?

DR. MELIUS: Yes.

DR. WADE: John Poston?

DR. POSTON: Yes.

DR. WADE: James Lockey?

DR. LOCKEY: Yes.

DR. WADE: Phillip Schofield?

MR. SCHOFIELD: Yes.

DR. WADE: Josie Beach?

MS. BEACH: Yes.

DR. WADE: Robert Presley?

MR. PRESLEY: Yes.

DR. WADE: Mark Griffon?

MR. GRIFFON: Yes.

DR. WADE: Gen Roessler?

(No responses)

Gen Roessler?

(No responses)

Gen, can you hear me?

(No responses)

UNIDENTIFIED: (Unintelligible)

DR. WADE: Okay. Gen, can you hear me?

DR. ROESSLER: I can barely hear you. Is that Lew?

DR. WADE: Yes, would you like -- we're voting. We're doing a roll call on the motion that would recommend adding a class, '49 to '59, of all workers at Mound. Would you like to have your vote recorded?

DR. ROESSLER: Yes, I -- I vote for the motion.

DR. WADE: Okay. Dr. Ziemer, would you like your vote --

DR. ZIEMER: Yes.

DR. WADE: -- recorded? So my count is that vote is 11 to zero in favor, one member not at the table.

DR. ZIEMER: Thank you very much. The motion carries. We will have the formal wording available for the Board on Thursday. That will be the wording that goes to the Secretary. The

Chair will ask Dr. Melius, who has the -- the template for SECs in his computer, if he would mind preparing that for us.

DR. MELIUS: Wanda tried to steal it but --

MS. MUNN: Yes, I tried.

DR. MELIUS: -- I got it back.

DR. ZIEMER: Thank you very much.

DR. WADE: Dr. Melius is -- has another motion.

DR. ZIEMER: Okay, a follow-up motion.

DR. MELIUS: Yes, I'd also move that the Board establish a workgroup to oversee the review of the -- this petition evaluation, as well as try to resolve issues related to the site profile review, and that we also enable SC&A to work on issues related to the Mound S-- SEC evaluation report.

DR. ZIEMER: Okay, you've heard the motion. Is there a second?

MS. BEACH: I second.

DR. ZIEMER: And seconded. Discussion? I want to ask Lew a question. That motion appears to include a tasking for the contractor. Can we include that in this motion or --

DR. WADE: Yes, we can, it --

DR. ZIEMER: -- do we have to do that

separately.

DR. WADE: No, I think we can include it, and the contract for this year has open space --

DR. ZIEMER: Right.

DR. WADE: -- for additional SEC --

DR. ZIEMER: Right.

DR. WADE: -- reviews.

DR. ZIEMER: Okay. Did you have a comment, Josie, on this? No. Okay.

MS. BEACH: I'd like to volunteer for --

DR. ZIEMER: Well, that's the next step. The Board would like to get the names of individuals who want to be considered for this workgroup. Okay, Josie Beach -- we may -- if we get too many, I'll make the final selection, but I want to see who's interested. Okay, Phil Schofield is interested, Josie is interested, Robert Presley is interested.

MR. GRIFFON: I was waiting to see who else -- I'm interested, but I was waiting to see --

DR. WADE: Brad.

DR. ZIEMER: Brad Clawson is interested. You're -- you're interested?

MR. GRIFFON: Yeah.

DR. ZIEMER: Mark is interested -- we have a

lot of interested people.

MS. MUNN: Yeah, I'm -- only if --

MR. GRIFFON: I'd be willing to let people who are not on --

MS. MUNN: Yeah.

MR. CLAWSON: No, I -- I'd be interested in letting Josie Beach chair.

MS. BEACH: Why is that, Brad?

DR. WADE: 'Cause it's not him.

DR. ZIEMER: Okay --

DR. MELIUS: How about Gen? She's not here.

DR. ZIEMER: We have -- we have five individuals who've volunteered. The Chair will announce a final committee Thursday and the Chair -- I need to mull this over a bit.

MR. CLAWSON: I've got a candy bar on Josie's --

DR. ZIEMER: Yeah, that's what I was looking for. Thank you. We have -- we have individuals, and the motion --

DR. WADE: Has yet to be voted on.

DR. ZIEMER: -- has yet to be voted on. That was a side comment that, if the motion passes, we have a plethora of volunteers. Actually the Chair was interested, too, but I'd like to get

others to do the work when possible.

All those who favor this motion, say aye.

(Affirmative responses)

Gen Roessler?

DR. ROESSLER: Aye.

DR. ZIEMER: Any opposed?

(No responses)

Any abstentions?

(No responses)

The motion carries.

DR. WADE: It carries by a vote of 11 to zero, with one member not at the table.

DR. ZIEMER: That's correct.

LAWRENCE LIVERMORE NATIONAL LABORATORY SEC PETITION

DR. ZIEMER: Okay, we're doing great. We have another SEC petition that may be less complex. It's the Lawrence Livermore petition. Dr. Glover is -- is Dr. Glover going to make the presentation?

DR. WADE: Dr. Glover is approaching the podium.

DR. ZIEMER: Sam Glover is going to make the presentation. Do we have any petitioners --

DR. WADE: We have a conflicted member who is --

DR. ZIEMER: Conflicted member --

DR. WADE: -- Dr. Poston is --

DR. ZIEMER: -- Dr. Poston.

DR. WADE: -- leaving the table and --

DR. ZIEMER: We'll trade Poston for Gibson, Gibson back to the table. Do we have any others conflicted?

(No responses)

Okay, for Lawrence Livermore, the petitioner will be available I understand by -- by phone. It's Raili Glenn -- is it Raili?

DR. WADE: Yes.

DR. ZIEMER: Raili Glenn, are you on the line?

MS. GLENN: Yes, I am.

DR. WADE: Did you -- could you repeat yes, please?

MS. GLENN: Yes, I am on the line.

DR. ZIEMER: Oh, very good. Thank you. Raili, after this presentation you'll have the opportunity to comment if you so wish.

MS. GLENN: Yes, I'd like to.

DR. ZIEMER: Okay. Dr. Glover, you may proceed.

DR. GLOVER: Thank you very much. Can you hear me now?

MS. MUNN: Yes.

DR. GLOVER: Yes? All right. So I'm going to present the Lawrence Livermore National Laboratory Special Exposure Cohort petition. I apologize, I left off the 0092 since...

Unlike the petition by Dr. Ulsh, this is an 83.14. It is generated by -- submitted by an EEOICPA claimant whose dose reconstruction could not be completed by NIOSH due to lack of sufficient dosimetry information. This claimant was employed at Livermore during the DOE operational period as an experimental physicist and is -- NIOSH's determination that it -- NIOSH's determination that it is unable to complete a dose reconstruction under these circumstances is reason to -- for an SEC class...

I will say any problems associated with this I will blame on Brant for breaking the computer ahead of me, so this is...

So a little bit of background, learn some things associated with this. Lawrence Livermore was actually a Navy base from 1942 to 1950, at which time -- in 1950 it was occupied by the Department of Energy, still is part of a

-- the Navy base. In 1951 the property was actually given to the Department of Energy, and so you see that our period starts before the official date of -- what the -- Livermore is des-- has -- typically described as being Lawrence Livermore. It was previously known as the University of California Radiation Laboratory at Livermore, and later as the Lawrence Livermore -- the Lawrence Radiation Laboratory at Livermore.

It consists of two sites -- sorry about the -- the decision of the scale, but you have the main laboratory site, which is located in Livermore, California; and we also have the Explosives Test Site locat-- no -- located near Tracey, California, previously known as Site 300. And I don't have a laser pointer so I -- I can't talk with my hands.

All right. Radiological operations in -- the well-storied events were it was a -- the sister lab of a -- of Los Alamos, with its original mission to develop thermonuclear weapons.

Since 1957 diversified activities included nuclear propulsion, fusion research, atomic vapor laser isotope separation -- the AVLIS

program, and charged particle beam and laser research.

Of course when you develop nuclear weapons where -- at the Nevada Test Site, it requires extensive testing to validate your codes and your understanding of those. Lawrence Livermore conducted numerous tests at the Pacific Proving Grounds, Nevada Test Site and Amchitka, Alaska. This graph kind of provide you some kind of ability to look at the above-ground and underground tests. Associated with this type of testing is the chemistry associated with those tests. They come back to the facility to be evaluated.

Other testing included off-site -- on-site nuclear weapons testing with non-fissile materials. That would be using -- at the Site 300. These occurred during periods of moratorium, and also in support of research activities. These mock tests included depleted uranium, thorium, and also other radioactive materials. Since 1969 only natural uranium, depleted uranium and natural thorium were allowed for testing with high explosives.

Weapons test materials, these are known as shot

samples, returned from the test sites for analysis. Wide range of debris was collected and analyzed. It was handled at many of the facilities at the site. These highly radioactive samples contained weapon-induced fission and activation products associated with the weapon itself, and also the surrounding ground materials and other -- we'll call them thermometer materials that you may put into a -- a weapon to evaluate its nuclear explosion properties, plutonium, uranium and higher order actinides.

Other radiological activities with activation products and mixed fission products include a reactor facility from 1957 to 1980. They had a pool-type reactor, the main Livermore site. '57 Livermore initiated nuclear propulsion work, which is reactor based. They linear accelerators and cyclotrons, they had fuel testing, biomedical research, and also of course the waste disposal associated with all those activities.

Sorry for the very busy table, but the buildings known to be involved with fission and activation products -- processes include an

extensive list here. We have a number -- I'm not going to read them, of course. You have the chemistry, nuclear and radiochemical chemistry analysis tests, accelerator studies, beam studies, biomedical studies, waste operations, linear accelerators, radiographs, the Plowshare program at the 300 areas -- an extensive list of facilities at which radiological operations occurred.

We'll say that the predominant documented radionuclides over this time frame was plutonium, uranium, tritium. Fission and activation products were at the site in the shot samples, fuel fabrication, weapons research, reactor, accelerator and cyclotron activities, and extensive research in a variety of applications.

The *in vitro* monitoring data that they support -- or -- dose reconstruction with, for *in vitro* they have a database known as MAPPER, maintaining and preparing executive reports database. For uranium there are over 16,000 results from 1958 to 1996; plutonium, around 7,700 results beginning in 1957 through 1996; other transuranics, we have 312 results from

'64 to '96. There were over 5,000 gross alpha results from 1956 to 1996. For gross beta/gamma we do have over 4,000 results, and only 325 before 1974.

The *in vivo* data is not contained in Livermore's MAPPER database. We did actually go and retrieve all the logbooks associated with the whole body counter. Approximately 50 to 200 *in vivo* counts were performed each year, beginning in 1965. However, the whole body counter was primarily in a state of research activities prior to 1974.

We did obtain workplace air data back all the way to 1953 for many of the buildings, including Site 300. Most of these results were total or net alpha and beta activity. Some re-- some results included the actual element that was analyzed. There was some mixed fission product air monitor-- fixed -- fission product air monitoring data from '59 to '67, and there was also air mon-- environmental data.

However, these results cannot really be tied to the breathing zone type samples we need to look at worker exposures.

Starting in 1961 the environmental data --

Livermore had a air monitoring data at two site perimeter stations and nine stations beyond the site boundary. In 1971 Livermore established a network of permanent outdoor stations to evaluate the radiological levels from plutonium-239, 240, uranium-235 and 238, and also gross alpha and beta.

As of July 23rd, 2007 NIOSH had access to 200 and -- 617 claimants; 88 percent of those had external data, 53 percent of those cases had internal data. However, only -- less than five percent of those included data for fission products.

We have developed models for coworker, using the MAPPER bioassay data. Uranium, starting in '58 -- I did miss -- there's a plutonium dataset -- mixed fission products beginning in 1974. These can be used to reconstruct dose during those time periods for all Livermore workers at all Livermore locations.

So with that, NIOSH proposes that for the feasibility of internal dose reconstruction, based on the minimal bioassay data for the period prior to 1973, mixed fission and activation products, NIOSH has concluded that

dose reconstruction is not feasible for workers who would -- who were or should have been monitored for mixed fission and activation products from 1950 through 1973.

Obviously the health endangerment determination is required. The evidence reviewed in this evaluation indicates that some workers in the class may have accumulated chronic radiation exposures through unmonitored exposure to fission products. Lawrence Livermore National Lab generated or processed unknown quantities of mixed fission products during the proposed class period as part of the work associated -- conducted for the Department of Energy.

Consequently, NIOSH is specifying that health may have been endangered for those workers covered by this evaluation who were employed for a number of work days aggregating at least 250 work days within the parameters established for this class, or in combination with work days within the parameters established for one or more other classes of employees in the SEC.

Feasibility of external dose reconstruction -- I do want to mention -- versus an 83.13, which Dr. Ulsh -- before this is an 83.14. We don't

try to say everything we possibly can do. It's a little more limited to what we can't do. However, when we look at the external doses, we do find that they're extensive and sufficient for external dose reconstruction.

So our recommendation for the period January 1, 1950 through December 31st, 1973, NIOSH finds that radiation doses cannot be reconstructed for compensation purposes.

The proposed class definition is all employees of the Department of Energy, its predecessor agencies and Department of Energy contractors or subcontractors who were monitored, or should have been monitored, for internal radia-- internal exposure to mixed fission and/or activation prod-- radionuclides while working at the Lawrence Livermore National Laboratory for a number of work days aggregating at least 250 work days from January 1, 1950 through December 31st, 1973, or in combination with work days within the parameters established for one or more other classes of employees in the SEC.

Additional information regarding the proposed class -- while NIOSH has access to

documentation that describes some of the activities and radionuclides specific to certain buildings, NIOSH does not have sufficient data to document the quantities and types of most fission products and activation products. NIOSH also does not have sufficient information to rule out the use of fission and activation products in other buildings where radioactive materials were handled or stored. However, NIOSH has no indication that exposures to mixed fission products and activation products would have been a concern in administrative areas outside of radiological areas; e.g., cafeterias, libraries, and office areas outside of radiologic-- radiological areas.

Additional information for the Board may be found at the "Document Review\AB Document Review\LLNL" directory. So be happy to take any questions.

DR. ZIEMER: Sam, could you clarify then, under this class definition what is the -- what would be the status, for example, of cafeteria workers or workers in the non-radiological areas? Are you assuming they have or had no

access to radiological areas?

DR. GLOVER: For the -- we --

DR. ZIEMER: For the non-radiolo--

DR. GLOVER: We don't make the determination where they work. However, if someone only worked in those facilities, we -- we're not asking that that be designated as part of the SEC.

DR. ZIEMER: It wasn't clear to me whether you have the ability to -- to determine whether or not they were -- those areas were accessible to them. Is that -- would that be done on an individual case basis? For example --

DR. GLOVER: It --

DR. ZIEMER: I'm trying to determine in my -- in your description whether this covers everybody on site or only people assigned to radiological areas.

DR. GLOVER: We're saying that it -- if it -- for folks who worked in those areas -- the Department of Labor has to make the determination if they can determine -- this is part of our --

DR. ZIEMER: Whether -- whether in fact that's -- okay.

DR. GLOVER: -- this is part of our discussion with the Department --

DR. ZIEMER: Okay.

DR. GLOVER: -- of Labor.

DR. ZIEMER: Okay.

DR. GLOVER: In the class.

DR. ZIEMER: So they have to -- they have to determine accessibility to those radiological areas, so --

DR. GLOVER: Yes.

DR. ZIEMER: Yeah, I gotcha. Wanda Munn, question?

MS. MUNN: Well, another clarifying question, the same lines, Dr. Glover. Can we assume then that the list of buildings that you showed us in your presentation is essentially the covered areas for which this class would be approved?

DR. GLOVER: The -- those facilities were the facilities that were -- that were -- that had radiologic-- radioactive materials, so...

MS. MUNN: So they would be the site that would be covered for this Special Exposure Cohort that we're proposing.

DR. GLOVER: Yes.

MS. MUNN: Individuals who had --

DR. GLOVER: Essentially.

MS. MUNN: -- access to -- who worked in or had access to those facilities. Is that the proper terminology?

DR. GLOVER: I think in our -- in our evaluation we -- we said that spe-- for places that are specifically outside of tho-- of a radiological area, if a cafeteria was outside and that's the only place a person would have worked, then they would not necessarily be included. And so I see how the specific...

DR. ZIEMER: Well, you had a table showing --

DR. GLOVER: We had a table essentially that --

DR. ZIEMER: Wanda I think is asking does that table encompass this cohort in -- or this class in terms of the description. In other words --

DR. GLOVER: Let's go ahead and flip back to the definition --

DR. ZIEMER: -- Labor would have to determine that the person had access to these buildings. Is that what we're saying?

DR. GLOVER: Essentially, yes.

MR. GRIFFON: Monitored or should have been monitored.

DR. GLOVER: Right.

MS. MUNN: Thank you.

DR. ZIEMER: Dr. Melius and then Dr. -- Mr. Clawson -- Larry --

MR. ELLIOTT: Well, I think it's more than this list. Am I correct, it's mo-- Jim and I both think it's more than this list. It -- it doesn't -- our evaluation and recommendation for the class would not include people who worked in cafeteria or library or were strictly clerical, but we're not confident that this list is the total list.

DR. ZIEMER: Oh, okay.

MR. ELLIOTT: Okay?

DR. ZIEMER: This may not be --

MR. ELLIOTT: And that's something we're going to have -- That's something we're going to have to work out with DOL on, I think.

DR. ZIEMER: Okay. It's at least this list, and if you find that --

MR. ELLIOTT: It's at least this list, probably more.

DR. ZIEMER: Okay. Dr. Mel-- or -- yeah, Dr. Melius and then Mr. Clawson.

DR. MELIUS: Yeah, I'm -- two areas of questions. One is -- my understanding from

reading your evaluation report is that you -- you've got a lot of monitoring data for the site. You don't have a lot for mixed fission products, but you have a lot in other areas, but it's a very complicated site in terms of a lot of different exposures and you're not really able to sort of reconstruct what people were doing during various time periods that they were being monitored or not being monitored. Is -- is that -- I mean is that the sense -- I mean that -- that -- the reason this is an SEC is because it's such a complicated work environment and you have, you know, some data but not enough to really be able to fully characterize that work environment.

DR. GLOVER: It's -- exactly, similar to Livermore -- to Los Alamos, you have a --

DR. MELIUS: Yeah, yeah --

DR. GLOVER: -- very complicated environment, and I would speak to that -- this class definition -- I was overly -- we -- I was -- to caution on the -- the table, that -- that where we know that they have -- I think we're asking for a definition that -- if Department of Labor establishes that the person only worked in a

non-radiological area, they could be excluded. However, we're not trying to say that this is only the specific areas that's --

DR. ZIEMER: Jim Neton (unintelligible) clarify --

DR. NETON: Sam, could you -- could you maybe switch to that last slide that said additional information, I think. That -- that tells the story.

DR. GLOVER: Let's see --

DR. NETON: Additional information, I think this sort of tells the -- the first paragraph speaks to that we don't have sufficient information to say where these things really were. So in a sense, the table is the minimum buildings, but it doesn't preclude other buildings from being added, nor other people who entered those other radiological areas. So in a sense it's kind of open and really is -- is up to the Department of Labor to characterize, in some ways, you know, who was in radiological areas.

The second bullet, though, speaks to we have no indication that anyone who solely worked in administrative areas had potential exposure to

fission products, so that's sort of to clarify that we didn't mean everybody on site, but people who could enter radiological areas.

DR. MELIUS: Yeah, but -- but ju-- just to that point, I mean really the rationale for the SEC is that that first paragraph there, the --

DR. NETON: Yes.

DR. MELIUS: You really just don't know what people were doing, where they were doing it and so forth, so --

DR. NETON: Correct.

DR. MELIUS: -- you really can't utilize the -- a lot of the exposure monitoring data that you do have.

DR. NETON: Correct.

DR. MELIUS: Yeah. Okay. Then -- then my question is, what changes in '73?

DR. GLOVER: At that point --

DR. MELIUS: And -- and I -- and I got your table of -- for those other people on the Board, if you -- I think -- believe it's page 19 of the report -- of the evaluation report where you outlined more of the mixed fission product bioassay data and you show that it increases, but I'm not convinced that -- you

know, is -- is this sufficient now to do dose reconstruction? Is -- is there something -- to me, it doesn't -- given the complexity of the site and the number of buildings and I think the number of people, I don't have a good -- good handle on that yet, wh-- why is -- you know, why does that change post-'73?

DR. GLOVER: That's -- at that point the whole body counter becomes more -- more functional, we certainly have more bioassay data if you look at the dataset, so it -- I -- do --

DR. MELIUS: I -- I -- I guess --

DR. GLOVER: I'll have to go --

DR. MELIUS: -- I -- I agree you have more, but do you have enough is the -- I guess is the -- the -- is it -- is it, you know, sufficient to be able to do dose reconstruction on such a -- you know, I mean it certainly doesn't cover everybody --

DR. GLOVER: Yeah.

DR. MELIUS: -- I don't believe, and -- and if activities -- I mean it's complicated, but activities varied from year to year and so forth. I mean if there was better, you know, radiological controls or -- I mean I'm just

trying to understand what -- what --

MR. GRIFFON: It -- it seems like, Sam, you're saying part of the rationale for that cutoff in '73 or '74 was introduction of the -- the whole body counting?

DR. GLOVER: The whole body counting --

MR. GRIFFON: (Off microphone) (Unintelligible)

DR. GLOVER: -- information, we have about -- we have more data, we can develop --

MR. GRIFFON: More data --

DR. GLOVER: -- coworker statistics that we can actually have a coworker set.

MR. GRIFFON: So it's not only --

DR. GLOVER: And really it's associated with the ability to develop a coworker model --

MR. GRIFFON: 'Cause I'm --

DR. GLOVER: -- if you --

MR. GRIFFON: -- I'm looking at the table that Jim was referencing on page 19 of the report, and it -- it does -- this is the *in vitro*, not the *in vivo*, so there's also *in vivo* that kicked in --

DR. GLOVER: Yeah, that's correct.

MR. GRIFFON: -- in '74 is what you're saying.

DR. GLOVER: They had research activity levels

prior to that, that is correct.

DR. ZIEMER: Okay, Brad, did you have a question?

MR. CLAWSON: Yeah, it partially got spoke on, and I don't know if this falls under the Department of Labor -- up there where you call out office areas outside of radiological areas, I guess what I'm looking at is more a lot of the clerical people and so forth that went -- go into these buildings and stuff, they may be stationed in these buildings out there, but a lot of them still go into the radiological areas to retrieve data, information and so forth. How are we going to be able to -- how -- how would we cover it all?

DR. GLOVER: For tho-- these would be specific people who did not go into the radiological areas.

MR. CLAWSON: Well, yeah, and I --

DR. GLOVER: This is what we discussed with the Department of Labor and how they wanted to administer the class.

MR. CLAWSON: Okay.

DR. ZIEMER: La-- Labor would have to confirm on an individual case basis, I assume, that

person did not in fact --

MR. CLAWSON: Well -- well, as I --

DR. ZIEMER: -- have an assignment or wasn't able to go into those areas.

MR. CLAWSON: And I understand that, and the thing that I -- and I -- I understand with Labor in this, but you know, even in the industry now I have people that are assigned to -- they're strictly clerical work, but they come into our radiological areas. They're retrieving paperwork, they're doing this, and they're being subject to the sa-- a lot of the same things that I am and I want to make sure that those people aren't excluded from this just because they're -- where they supposedly work 'cause they do come into those areas.

DR. ZIEMER: Another comment, Jim?

DR. MELIUS: Yeah, I mean just to -- to clarify. I mean there is *in vivo* data available prior to '73. Apparently it wasn't product-specific, so -- so post-- you don't have a good, you know, section in the report that I can refer to that sort of says to what extent -- how did -- what extent did it cover the people working there post-'73?

DR. GLOVER: Post or pre?

DR. MELIUS: Post, post.

DR. GLOVER: Yeah.

DR. MELIUS: And -- and -- again, I -- I just a concern that, you know, where -- where do we draw the line and then -- and -- in this, I mean --

MR. ELLIOTT: Again, this is an artifact of an 83.14 where --

DR. MELIUS: Yeah, yeah.

MR. ELLIOTT: -- we -- we can both spend more time digging to establish if the boundary is firm or not in the class definition.

DR. ZIEMER: Well, you might get a case -- a later case and find that you can --

MR. ELLIOTT: We may.

DR. ZIEMER: -- reconstruction, in which case --

MR. ELLIOTT: We may, I --

DR. ZIEMER: -- you would extend the boundary then.

MR. ELLIOTT: Let me go back and answer Brad's question, though. Those folks who are stationed, and then by nature of their -- as an administrative or clerical folk, but by nature

of their work go into these areas, these are radiological control areas. As you know, they're going to have an access entry point, like we talked about last night in a workgroup session.

There's another element here about this site that I don't think comes out in our evaluation report, and I think we should consider, and that is there was a high interest for product integrity in the work being performed in this research at this lab. What I mean by that is they're very careful or very cautious about these small amounts of isotopic -- different isotopes, and they wanted to make sure that they had a mass balance on those, they wanted to make sure they knew where they were at, where they had been, you know, what reactions had taken place with them. So there's a very -- we think a very clear inventory of that.

That doesn't necessarily get to whether or not a person was a roving worker who got in and out of these places, so we're trying to craft a definition here that says these are the buildings we know of. We're going to probably add more buildings to that. But if it was just

a cafeteria worker, only in the cafeteria, and we don't believe that that person would have been in an exposed situation where they were monitored or should have been monitored.

DR. ZIEMER: Yeah, Phil.

MR. SCHOFIELD: Okay, I got some problems here. One, buildings, given the historical --

MS. MUNN: Mike, Phil.

MR. SCHOFIELD: -- way these things are done, some of those buildings you could -- the only thing separating a person working in a radiological area and non-radiological area was a few two by four studs and some sheetrock. And these cases can be shown throughout many of the facilities, you had labs on one side of the wall; on the other side of the wall you had clerical people or whoever working there. The other thing is I don't see any americium listed there, and Livermore did do -- deal with americium. The 300 area in particularly (sic) I would be surprised if there was not any Pu-240 ever been used in the 300 area. True have been small amounts, but knowing some of the projects that went on, I would have expected them to have it in the 300 area, and I don't

see any data for either one of these two things where people are being looked at, even post-'73, from what you presented.

DR. GLOVER: Again, this is a product of an 83.14 versus an 83.13, which I won't try to -- if it affects it during that time frame where it was looking primarily at mixed fission and activation products during that '50 to '73 time frame, what can't you do and not everything that you can't do necessarily, so that this -- this is a self-designated area where we don't believe we can do dose reconstruction, so we haven't tried to look at every individual radionuclide or every individual circumstance.

DR. ZIEMER: You mentioned some of the tests being done off-site -- for example, Amchitka and the Test Site and so on. Did -- did these workers actually go there or did they just send their samples there for...

DR. GLOVER: Every test site, and I'm sure Mark or the NTS folks can speak to this extensively, but there was actually a shot crew, and you would actually -- they oversaw the shot, they oversaw the drill-- what they called the drill-back, the collection of that samples, whether

they got good mud or bad mud, and actually -- so the -- all the parts of that analytical protocol so they can understand -- you know, they actually oversaw -- did mi-- nuclear weapon work, so they saw -- you know, taking the samples out, the -- the explosion and then the pull-back of those samples, so they had...

DR. ZIEMER: So if they went to Amchitka, they might be eligible for SEC status under its situation. Is that correct? Mr. Presley.

MR. PRESLEY: You had -- you had rad worker people, you had engineers that were on site for Livermore, Los Alamos, Sandia, Hanford -- can you not hear?

MS. MUNN: I can hear well.

MR. PRESLEY: Okay. And these workers would -- would work their regular job, and then when they were involved in a shot, they would go to the area where the shot was and they would work on the shot, and then they would come back. That's why that when you see some of these -- the people that paperwork, they will have -- if you look at the area where they worked, some of them will have Amchitka and Livermore. They will have Amchitka and Los Alamos or Sandia.

You will have multiple sites on some of the people that actually worked on the projects.

MR. CLAWSON: And actually, Dr. Ziemer, we saw that in the dose reconstruction, the -- one of them that we chose today was Lawrence Livermore and Amchitka.

MR. ELLIOTT: To answer your question, Dr. Ziemer, yes, if one of these Lawrence Livermore staff participated in one of these tests at one of the test sites and they were there during that class period, they can accumulate time in those classes.

DR. GLOVER: It would add to their 250-day requirement.

DR. WADE: Phillip did raise the question early in his question about sheetrock and two by fours separating radiological control areas from non-control areas. Do you have an opinion or --

DR. GLOVER: I think what we're trying to say is radiological buildings, not necessarily if I -- if I got a guy who works on one side of the two by four and not the other, we wouldn't say whether they tried to cross that. Say if they worked in a radiological building, you were in

that area -- in a cafeteria that's not attached to that -- a facility. If you had -- like at Mound where they kind of mixed in the middle of all that where you wouldn't be able to disassociate it, but in facilities that may be strictly not attached to a radiological building, that would be...

DR. ZIEMER: Okay. Phil?

MR. SCHOFIELD: Okay, I hate to bring up the obvious here, but like was just said, we always had these problems of ventilation of the discharge from one facility, and the other facility right next door to it lot of times is drawing their air from the same zone that it's being discharged from the neighboring facility. Unless you can pinpoint those buildings down, I think you would have to give credit to anybody who works in that general area.

DR. GLOVER: I believe there's some discussion in the report, and I don't have the report -- Jim Neton's going to speak to the point here.

DR. NETON: Yeah, I -- I think we need to go back to the definition itself, which is monitored or should have been monitored, which we have consistently considered the -- anyone

who had the potential to receive more than 100 millirem of exposure, in this case for internal -- from internal radionuclides, so that's what would be considered by Department of Labor. And I know from past experience, they would entertain affidavits and whatever from -- from petitioners or claimants to make that determination. So the issue is -- is -- by nature it's somewhat of an open issue, but we have to keep our mind on this 100 millirem exposure limit, and that's -- that's a pretty small exposure to have to demonstrate.

DR. ZIEMER: Any other comments?

DR. MELIUS: Yeah.

DR. ZIEMER: Jim.

DR. MELIUS: I'm -- I'm still hung up on the 1973 cutoff and exactly what the rationale for that is. Is there a -- a work-related -- what kind of procedures, what kind of activity at the site that -- that changed in '73? Is it the -- something about the 83.14 process which Larry sort of implied? Or is it something about the nature of the monitoring program?

DR. GLOVER: That's where we felt we could establish a coworker model.

DR. NETON: I think if you look at the evaluation report, it says something to the effect that we have almost no bioassay prior to '73. I mean none.

DR. MELIUS: Yeah.

DR. NETON: And starting in '72 there was a few samples, '73 there were more, and at the same time the whole body counting program kicked in -- not on a research basis but more on an operational basis. So we feel with those two things on line, we could construct a coworker model of sufficient accuracy to bound the doses. If the Board's interested in seeing the details of that coworker model and reviewing it, I mean that's certainly something we could provide.

DR. MELIUS: You -- you -- you have not developed that yet.

DR. NETON: I think it is in place, is it not?

DR. GLOVER: The Livermore coworker model is in draft.

DR. NETON: In draft form at this point, okay. But -- so that's something that the Board could certainly look at and -- under their normal process of evaluation of our site profile --

MR. GRIFFON: Well, okay, so is it --

DR. NETON: -- documents and that sort of thing.

MR. GRIFFON: Can I ask just -- I don't know that we need to look at it right now, but is the coworker model a -- a -- based on bioassay or -- I mean based on *in vitro* or *in vivo* or -- usually you use *in vitro* for these, but I don't know --

DR. NETON: Yeah, I --

MR. GRIFFON: -- with this case.

DR. NETON: I honestly haven't -- haven't seen it myself.

MR. GRIFFON: Okay.

DR. NETON: It's in draft form, but I would -- I suspect that it's based on the bioassay samples, backed up with the *in vivo* data, which we always did --

MR. GRIFFON: (Unintelligible) --

DR. NETON: -- sort of a sanity check --

MR. GRIFFON: -- way you do it, but --

DR. NETON: Yeah.

MR. GRIFFON: -- the only question I would have there then, going back to the table that Jim was asking questions about, is -- you know, the

-- the number of samples increased, but I also notice that the number of locations increases almost proportionately to the number of samples --

DR. NETON: Yeah.

MR. GRIFFON: -- so it seems like you -- you don't have much better statistics in terms of -- you know.

DR. NETON: Well, we're certainly willing to discuss this --

MR. GRIFFON: Okay.

DR. NETON: -- once the model comes out and can be viewed as part of the Board's normal deliberations of our -- of our science. I mean right now we feel strongly that prior to '70 --

MR. GRIFFON: Yeah.

DR. GLOVER: '73.

DR. NETON: -- '73, we can do these with sufficient accuracy.

MR. GRIFFON: I guess we can always look at one period and then discuss --

DR. NETON: Oh, absolutely, there's always --

DR. ZIEMER: The door remains open --

DR. NETON: The door remains open.

DR. ZIEMER: -- for something beyond '73.

DR. NETON: Right.

DR. ZIEMER: It's not precluded --

DR. NETON: Exactly.

DR. ZIEMER: -- at a later (unintelligible).

DR. WADE: Where -- where would the coworker model -- where would that work product be that would contain the -- the coworker model?

DR. NETON: It -- it could either be part of the site profile or it could be a stand-alone document, I'm not sure what it would come up, but it would either be a TIB or --

DR. GLOVER: It is a TIB.

DR. NETON: It is a TIB, so it's a Technical Information Bulletin issued by NIOSH.

DR. WADE: So that would be something that would typically be reviewed by the bureau as a -- by the Board as a procedure?

DR. NETON: It would be available to be reviewed as a procedure by the Board.

DR. WADE: Okay, thank you.

DR. ZIEMER: Okay. Other comments?

MR. GRIFFON: Just a -- and -- and I don't know, I -- I agree with Larry and Jim on -- on the way they've characterized this -- the definition. I -- I just think it might be

worth discussing a little more as a Board. I mean my concern with this is that -- something we're -- we're dealing with right now with Rocky Flats, and I'll -- I'll report on it in the workgroup, but -- and I -- and I -- you know, I -- I was part of that process because I suggested for Rocky Flats to use the language "monitored or should have been monitored" be-- just because we weren't sure of the -- the breadth of the number of buildings that could have had neutron exposure in that case. Here -- here, this is the same concern I have with -- with this definition, that if -- if we have -- in a lot of cases we're going to be relying on probably work history cards, and they may have -- well, I don't know, I guess it's a question, too, do we have work history information for the individuals that -- you know, I guess saying that DOL will make this determination is one thing. But if you already know there's no good work history for these people, I think you have to say these -- you know, we can't just throw these to DOL. We know we don't have work records of where these people went and therefore we should go broader than just

monitored or should have been monitored. We should just say all workers. If you have work history information, then the question would be if it says they were -- sort of -- if it's by building designation, a lot of times -- one concern we've been grappling with with Rocky Flats is if they're assigned to one building -- like maintenance crews could have been assigned to a maintenance building where there were no potential exposures to this type of -- you know, the -- the radionuclides of interest, but they could have been sent out to other locations. And how do we -- you know, from -- even if we went back to interview people, a lot of the -- a lot of these are survivor claims, so you can't necessarily get it in your CATI interview process.

I guess that's the question, is we don't want to leave this in a -- in dispute mode. Rather, we'd like to be clean with our definition, as -- as clean as possible.

DR. ZIEMER: Jim.

DR. NETON: I think if you go back to these two bullets on this one slide, I think we've -- we've cast about a broad a net as we can

without saying everyone on site. It essentially says anyone who had the potential to work in any building that had radiological material is covered. If you read that first bullet, that's basically what it says.

MR. GRIFFON: Yeah.

DR. NETON: All it has is a proviso in the second bullet that says for those who could clearly be defined as not having any potential exposure to radiological material or less than 100 millirem, they're not. And so I think it's -- it's very close to that, but I think we do believe strongly that there are some areas on site that could have not had -- you know, certainly a true administration building, completely separated from the radiological areas, would not have exposure. And that's why we put that in there, just to make sure that that possibility was -- was open so that, you know, we weren't covering someone in an administration building that had no --

MR. GRIFFON: Yeah.

DR. NETON: -- potential for exposure.

MR. GRIFFON: And -- and I don't disagree with you in theory. I just want to make sure we

have the -- the data available to -- to prove that one way or the oth-- you know, in other words, we have the job information or the -- you know, for each individual available to --

DR. NETON: Yeah.

MR. GRIFFON: -- DOL can make that determination. It's not -- that -- that would be my question, you know. I don't agree with you -- I don't disagree with you theoretically, you know.

DR. NETON: Yeah, yeah.

DR. ZIEMER: Okay, we're going to take a 15-minute break and, Board members, that'll give you a chance to mull this over again -- or some more, after which we can determine whether or not we have an action to take. So it's 3:25, let's be back here at 20 till 4:00.

DR. WADE: Okay, for those on the phone, we'll just mute the line, then we'll open it back up at -- in 15 minutes.

(Whereupon, a recess was taken from 3:25 p.m. to 3:40 p.m.)

DR. ZIEMER: Okay, we're ready to reconvene if you'll please take your seats.

(Pause)

We still have before us the Lawrence Livermore petition. This -- the Chair would ask if there are any more comments or questions on the petition from the Board members. Mr. Clawson?

MR. CLAWSON: You know, we -- we've put Sam kind of in a predicament there because we've kind of been expecting him to answer these questions of employment and so forth, and I was wondering if we could get Labor to discuss anything on that. I know that I saw Jeff here and I was just wondering.

DR. ZIEMER: Okay, Jeff, do you have any comments at this time? You're -- I guess you heard the previous discussion and know that the concerns have to do with how one establishes whether or not the -- the particular claimant has been in a radiological area or has access to it and so on.

MR. KOTSCH: Right. One of our concerns would be always that the definition be as explicit as possible. We had, as Mark noted, issues with the Rocky Flats, and we've had issues with some other site where the definition wasn't always as explicit as perhaps possible to interpret the class. Certainly the addition of something

about -- and we're not going to def-- you know, we don't want to direct the -- the definition of the class, but if -- if there was clarification regarding whether, you know, you could have non-radiological or admin types, you know, were separated out or something like that. The "monitored or should have been monitored" is good. It's sometimes difficult for the Department of Labor to def-- to actually decide who those people are.

To -- with -- forget -- some -- Brad, did you have other specific concerns?

MR. CLAWSON: Well, the main thing that I'm getting into is that -- I know we've seen it at numerous other sites and so forth like that, especially with their labor history or so forth like that, somebody may have worked in a high radiation area for so many years, and then as they get older and so forth like that gone to a non-radiological area. And in -- and on their -- on their claim and so forth their labor history shows them as just being there. I give an example of -- in Idaho where the fella worked on the jet propulsion systems, he worked at MTR/ATR, all those reactors. But as he got

older and wasn't able to do more as this, he went into a non-radiological area and his claim was denied because there was no radiation in this area, but -- and it was due to his labor history that they said there, and I have an issue with that because I think a lot of times this can happen. And I just want to try to make sure as we're going into Lawrence Livermore and so forth that we can either right it or we can do something to be able to capture this because there is a lacking with the labor history of -- you know, they kind of forget what happened before. And when you start thinking of not a person that had been there but let's say their widow or so forth like that that doesn't have all the history of where he was at, I really see this as an issue.

MR. KOTSCH: Yeah, we -- and we recognize those things. I mean each case is obviously done on a -- on a case-specific bas-- you know, case-by-case and looked at in that case. But again, like we said, when the definitions are more specific, that -- it certainly helps us in the interpretation of that class.

DR. ZIEMER: Right, so you do -- do try to

establish the full work history, not just take the final job classification --

MR. KOTSCH: Yeah --

DR. ZIEMER: -- and assume that.

MR. KOTSCH: -- (unintelligible).

DR. ZIEMER: Right. I -- I just realized that I neglected to give time for the petitioner to speak. Raili Glenn, are you still on the line?

MS. GLENN: Yes, I am.

DR. ZIEMER: Oh, thank you for being patient. Do you have some comments for us?

MS. GLENN: Yes, I do. Am I on now?

DR. ZIEMER: Yes, please proceed.

MS. GLENN: Am I on now?

DR. ZIEMER: Yes.

MS. GLENN: Yes. Okay. My name is Raili Glenn, okay? My husband -- I give -- I give you a little bit background to him. My husband, David Glenn, supported himself since he was eight years old. He put himself through graduate school and he was top of the -- his class with grade point average four. He always worked one to two shots while attending school. No one helped him financially since he was eight. He did not get any government help, or

did he ever ask. His goal was to be physicist. He wanted to work on the projects that would benefit our country.

After he graduated with honors at Washington State University David got job in the Lawrence Livermore National Laboratory, 1966. He worked there 25 years. He did lot of experimental work site 300 and he also did a lot of nuclear shots in NTS which I will comment more. And I remember him telling me that lot of (unintelligible) was done underground and no one worried about contamination those days. Whatever was not used or needed anymore was (unintelligible) and around.

David did test different kinds of chemicals. Some are classified and some are unclassified. Site 300 is most contaminated site in country. Lawrence Livermore Lab found out that there were -- their ground water was contaminated, and benzene was found in the drinking water. Before 1960 Lab site was used for Air Force base. When the Lab took over, no cleanup was done at the site and benzene caused bone marrow cancer. That's what my husband had.

David worked several kinds of -- several kinds

-- no, I'm sorry. David worked different kinds -- different buildings at the site (unintelligible). I remember him telling me that there was a radiation leakage while he was there, but I do not remember location.

David also had tremors. His hands -- hands were shaking. He had hard time writing or holding something in his hands steady. He was examined by neurologist several times to see if he had Parkinson's Disease, but doctors could not see any signs of that. Doctor was never able to find what caused the tremors. Lately Oak Ridge Institute has done studies that mercury, plutonium and uranium cause tremors. It cause the tremors.

He did lots of writing nights and weekends at home. He never took a vacation when he was employed by Lab. He was writing his numerous publications at home. David wanted to leave more knowledge behind for future generations to come, more than what he had taken with him. He definitely left a legacy behind.

David was getting too ill to work so he took retirement -- the retirement when he was 58 years old and suffering until he's dead, 2005.

Lawrence Livermore National Lab has destroyed all David's X-rays and badges do not show what he inhaled. X-rays taken in (unintelligible) Hospital show that his lungs have been 'taminated by radiation.

When he retired 1990 he was only earning less than $50,000 a year. Lab did not pay (unintelligible) big salaries. In 1970 he was only making $16,000 a year. If he was working in a private company he would have made four times his wages, but David loved his job and that was the reason he worked there. His job's his life and he benefited. He believed research.

I have calculated his wages total 20 years he earned while in Lawrence Livermore National Lab. It totals $780,178, and the medical bills totaled last 16 years, all the expenses associated his illness, totaled $177,280. I came up what he earned by working 25 years and what he spent last 16 years for his medical expenses was 25 percent of his earnings.

David's illness did not only harm David, but also his family. I had to quit working to take care of him and take him to medical treatment

and doctors' appointment. It happened several times a week. It had big impact in my life, financially, physically and emotionally.

I wish that I did not have to testify this to you, but unfortunately that is not the case because he is not here to (unintelligible). I thank you for listening and I hope that you are looking deeply in my case. This has been in your books already six years. Do you have any questions?

DR. ZIEMER: Okay. Thank you very much, Ms. Glenn. Let me ask if there are any questions, Board members?

(No responses)

Apparently not. Thank you very much.

MS. GLENN: Okay, you're welcome. Thank you for listening.

DR. ZIEMER: Board members, any other comments or questions in general on this petition? Dr. Melius.

DR. MELIUS: Yeah, just back to that -- that issue on the definition and Brad's questions. I think, if I understand the report and the presentation, I think we're saying that Table 4.2 in the report, and it was in the slide

presentation also, the list of buildings and so forth, we want the -- it would be people working in those buildings, but not limited to -- there may be other buildings, so I guess my question is do -- is -- is that something that -- in terms of dealing with -- helping Department of Labor, is it enough to have it in the report or do we want to somehow reference that in a -- any sort of recommendation that we make? It sort of cuts both ways and maybe it's something that we need to think about, but we -- we always struggle with this issue of the class definition and I -- I -- I would think --

DR. ZIEMER: Well, while they're pondering that --

DR. MELIUS: Yeah.

DR. ZIEMER: -- let me suggest that if -- if this Board doesn't have a recommendation for Friday, we're going to have that issue in the wording itself anyway. How -- how will we define that class, just using the words on the slide or can it be refined further?

MR. ELLIOTT: Well, this is similar to the Los Alamos class where we had a ver-- a variety of technical areas, but we weren't confident that

they were all-inclusive and so we didn't put into the definition a listing of those because we didn't want to ex-- loo-- have it look like it was inclusive and we would exclude somebody.

DR. ZIEMER: (Unintelligible) just use the words "radiological areas" then.

MR. ELLIOTT: Yes, I think that is the best. And then we have to work with DOL to define, for them, what we consider to be a radiological area.

DR. ZIEMER: And once you do that, DOL ends up in a sense with a list of buildings as a starter, I suppose.

MR. ELLIOTT: Yes, I -- I think that is the starting point.

DR. ZIEMER: And if you later find another area, is there a formal process where that gets added?

MR. ELLIOTT: We can rec-- if we find it, we can certainly recommend to DOL that this is an area that should be included in the class. They have a technical bulletin process, as you've seen in the Rocky Flats experience, where they've added a building or two to the list that we provided them.

DR. ZIEMER: Jim, does that answer the question, or does that raise more questions for you?

DR. MELIUS: I -- it -- it -- it -- yeah, I mean it sort of answers in the sort-- I -- it -- it's -- I'm never quite sure what the right ap-- approach is (unintelligible).

DR. ZIEMER: We all -- "we" being the Board and NIOSH and -- and Labor, all want to have the correct definition and make sure we're not excluding people that should be included. But at the same time, not include people who shouldn't be included, I guess you'd have to say.

DR. MELIUS: Yeah.

DR. ZIEMER: So it cuts both ways, but -- so it's important that we give some care to what the definition is.

DR. MELIUS: And certainly -- it -- the -- long as the -- certainly the public record would show that -- that we were referencing that -- that table in the report and that was sort of the basis with -- for the -- you know, defining the Special Exposure Cohort, but with the understanding that there may very well be other

locations at that site that aren't listed in that -- that particular table, but that would be certainly the place to start from.

DR. ZIEMER: Now I'd like to ask the Board if you would like to take action on this recommendation from NIOSH -- that is, to recommend to the Secretary that this group be added to the Special Exposure Cohort, the group up through '73. And again, that action does not preclude additions later on, and if the Board made such a motion the Chair would be prepared to ask our SEC workgroup which Dr. Melius chairs to take the responsibility for looking at the issue of the -- of this SEC particularly and the models that would be used in -- in the co-- the cohort models that would be used. But let me ask if anyone wishes to make a motion.

MR. GRIFFON: Coworker models.

DR. ZIEMER: Coworker model. Does anyone wish to make a motion on this?

Mr. Schofield.

MR. SCHOFIELD: Yeah, I'll make the motion to give -- but like I -- still I would like to have -- before we can finalize it, that we have

a little better definition of how they're going to make this determination for the buildings and stuff, so who will be in it and who won't be in it.

DR. ZIEMER: Well, I -- I think that we just heard that the definition is going to actually be somewhat -- shall I use the word fuzzy? It's going to try to be inclusive --

MR. ELLIOTT: I don't think it's fuzzy at all. It's --

DR. ZIEMER: No, I --

MR. ELLIOTT: -- all radiological areas --

DR. ZIEMER: All radiological areas.

MR. ELLIOTT: -- on the site during those years. That is not fuzzy.

DR. ZIEMER: No.

MR. ELLIOTT: That is what we're saying. What's excluded is those non-radiological areas.

DR. ZIEMER: Actually that gives me a warm fuzzy feeling, though, Larry.

MR. ELLIOTT: Well, I'm happy for you.

DR. ZIEMER: But you're quite right -- you're quite right -- The Chair apologizes for using that term. It -- it's not precise in terms of

specific buildings, so in that sense -- that was not a good descriptor, however. And it's very precise, radiological areas. Now radiological areas, to some health physicists, may be fuzzy.

Okay, Jim Melius.

DR. MELIUS: Yeah, I'll -- I'll second Phil's motion and also maybe offer a suggestion that maybe the workgroup can sort of monitor what goes on between NIOSH and DOL, if only for educational purposes in trying to see if we can get this process figured out and improved, if necessary.

DR. ZIEMER: Okay. The motion before us then is to recommend to the Secretary the addition of this class to the Special Exposure Cohort, the class as described by the NIOSH evaluation report.

Any discussion? And again, we would come back Thursday with the specific wording that would go to the Secretary. Wanda Munn.

MS. MUNN: You know, with only minor modification to the wording of the proposed class as it was shown to us, we can probably get as -- as specific as we're going to be able

to get, just relying on that wording alone. It's of concern that we continue to be unable to get precise enough to be able to make a decision on this without creating more problems that we're -- than we're solving in our language. The proposed class is all employees at the Department of Energy, its predecessor agencies and contractors and subcontractors who were monitored or should have been monitored for external exposure -- at this point if we said in all radiological areas of the Lawrence Livermore National Laboratory for a number of work days, et cetera, et cetera -- it appears that it would come as close to covering what we want to cover as we're likely to be able to get, without a number of additional codicils, pages of dialogue and specifically excluding individuals.

DR. ZIEMER: Well, I -- I think in essence that is the motion.

DR. MELIUS: Yeah, that -- can I cover that? I mean yeah, that is -- is the motion and that's, you know, I think what we're approving. I think the issues we've heard the Department of Labor state that they would -- that in some

ways it's easier for them if it's more specific, building-specific or whatever in -- in terms of a definition. I think NIOSH has made the case that in this instance that's not easy to do because we may not have complete knowledge of all the places where -- where people were, and I think we just -- and Phil and Brad and others have raised concerns about how this'll be implemented, and I -- I think what we're trying to say is let's see if the -- you know, hold to that definition for now, but let's see if, as we move forward with this, if there's a better way of doing this. We've had a unfortunate problem with Rocky Flats and I think it would help us if we continue to try to figure out if there's a better way of doing these class definitions that -- that is -- makes it easier for Department of Labor to implement that and captures the intent of what's in the -- the NIOSH report.

DR. ZIEMER: Thank you. Board members, are you ready to vote then? Okay, we'll vote by roll call again on this.

DR. WADE: Brad Clawson?

MR. CLAWSON: Yes.

DR. WADE: Wanda Munn?

MS. MUNN: Since I'm not certain still exactly what we're voting on, I --

DR. ZIEMER: Well, we're voting on the motion, basically as you described it.

DR. MELIUS: Yeah.

DR. ZIEMER: I'm putting the burden back on you.

MS. MUNN: If I described it that way, and that's what I'm voting on, yes.

DR. WADE: Dr. Melius?

DR. MELIUS: Yes.

DR. WADE: Dr. Lockey?

DR. LOCKEY: Yes.

DR. WADE: Phillip Schofield?

MR. SCHOFIELD: Yes.

DR. WADE: Josie Beach.

MS. BEACH: Yes.

DR. WADE: Michael Gibson?

MR. GIBSON: Yes.

DR. WADE: Robert Presley?

MR. PRESLEY: Yes.

DR. WADE: Mark Griffon?

MR. GRIFFON: Yes.

DR. WADE: Gen Roessler, are you on the phone?

Gen?

DR. ROESSLER: I'm on, I vote yes.

DR. WADE: All right. And Dr. Ziemer, would you like --

DR. ZIEMER: Yes.

DR. WADE: -- your vote recorded?

DR. ZIEMER: Yes.

DR. WADE: Okay, so the vote is unanimous, 11-0, with one member away from the table.

DR. ZIEMER: Okay, thank you very much.

MS. MUNN: Thank you.

DR. ZIEMER: Then the Chair does ask the workgroup on SECs, chaired by Dr. Melius, to take this issue as a part of their task to monitor and work with NIOSH -- and our contractor, if needed -- to look at the open questions on this particular petition.

Okay, Dr. Poston now is returning to the table, I think.

NIOSH PROGRAM UPDATE

Our next item is an update -- a NIOSH update and Larry Elliott is going to provide that for us.

MR. ELLIOTT: Good afternoon, ladies and gentlemen of the Board and members of the

public. It's a pleasure to be here in Las Vegas again to give you another program status update and talk about a variety of things. We'll go through a typical set of slides that I use to present where the program is at, you've seen many of these, but the numbers constantly change. I'll try to point out for you critical changes that -- and trends that we're -- we're monitoring at this point in time.

As of the end of December of last year, that would be the end of the first quarter of the fiscal year '08, 26,108 cases have been referred to NIOSH for dose reconstruction. We've completed 75 percent of those, or 19,255. And if we break that number down further, 17,074 have been returned to the Department of Labor with a dose reconstruction report for a decision by DOL.

We've had 670 claims pulled from our dose reconstruction program by the Department of Labor, and this happens for a variety of reasons, as I've told you in the past. In some cases it may be a claim that was sent to us that was a Part D, or now Part E, and shouldn't have been referred to us. In other cases it

might have been a chronic lymphocytic leukemia claim, and that is the only cancer not covered under this program at this time. But there are other reasons as well, but 670 have been pulled from dose reconstruction so we consider our work to be completed on those. There have been 1,511 claims or cases pulled from dose reconstruction for SEC class determination by Department of Labor.

We have 25 percent, or 6,541, of that 26,108 that are still at NIOSH for dose reconstruction. And in that -- in that number, 6,541, there are actually 851, or 13 percent, of those claims are -- have a dose reconstruction in front of the claimants under their review. So we've completed our work on 13 percent of that 6,541 and we're waiting for the -- for the claimant to -- or claimants to provide us an indication that they have no information to provide and the claim can be moved on to Department of Labor.

We have one percent, or 312, claims that have been administratively closed. And this terminology means that we have completed our work on the claim and we're awaiting the

claimant to indicate to us, in signing what we call an OCAS-1 form, that they have no further information to give, and this -- this number has not changed dramatically over the course of time. It remains about one percent of our claims.

Here's a pie graph to show you those similar numbers -- number completed; number pulled, pulled again meaning that Department of Labor has retrieved the claim from us; the number that have been pulled from us for SEC purposes, to determine eligibility. Those that are administratively closed are in red, as you see. The active claims in this pie chart are shown in yellow, and we have in green a -- these are also part of the active claims, but they are pended for some technical reason. So the yellow and the green can go back and forth, changing as -- as technical issues are identified and we resolve those issues, a claim can be unpended and become active again.

Of the 17,074 dose reconstruction claims that we sent back to DOL for final adjudication, we believe that 32 percent of the cases had a probability of causation of greater than 50

percent or would be found to be compensable by the Department of Labor. That leaves 68 percent, or 11,600 claims, that had a probability of causation of less than 50 percent, and we believe the Department of Labor will recommend a denial in that -- those instances.

If we look at the distribution of probability of causations that you -- as are depicted in this graph -- bar graph slide, and these numbers total up to that 17,000-some that we've sent back to DOL, you'll see that -- that the claims that are non-compensable, those that are between zero and 49 percent probability of causation, are trending to be pretty flat-lined across those distributions.

Of the 6,541 cases remaining at NIOSH for dose reconstruction, 2,242 cases are currently assigned and are in some state of progress of dose reconstruction. They're assigned to a health physicist and they're moving through that -- that process. 851 initial draft dose reconstruction reports are currently in the hands of the claimants and NIOSH is awaiting the return of the OCAS-1 form from those

claimants so we can move those on to Department of Labor. 3,448 cases are not assigned currently to a health physicist for dose reconstruction. And as I indicated, some of those are -- more than 1,000 -- are pended for a variety -- various reasons.

That leaves a bullet here that I need to speak about particularly. As we look at the oldest cases in our hands that are of the active category, 52 percent are noted to be older than one year. And we take special note of that 'cause we're trying to exert extra effort to move the oldest cases through the system.

That leads me to this next slide which speaks about the first 5,000 cases that NIOSH had received and how much work do we have left in that category of claims, those being the oldest claims. I think the -- the key number here is the bottom number. We have 59 that are still awaiting a dose reconstruction. And of that 59 -- that number will be reduced, we think, to 44 very quickly as the NUMEC class is adjudicated. Fourteen of those 59 -- 15 of those 59 cases are NUMEC claims that we feel will be eligible in that class. That still leaves us with 44

that we need to work very hard on and get an answer to the claimants on their dose reconstruction.

I think it's -- there's some important background here to consider. We have -- in late October we went to Washington, D.C. and Dr. Howard was asked to give testimony in front of the -- Senator Kennedy's health committee, and in that we were asked about timeliness of dose reconstruction, how long does it take to do a dose reconstruction. The background I want to share with you is that in the early days of the program we -- we received over 10,000 claims right away, as soon as -- as DOL could process those claims, we -- it resulted in a backlog to us. That -- a decision was made to look at where those claims came from, which site they represented, and to then make an extraordinary effort to develop site profiles or Technical Basis Documents, tools that could be used to reconstruct doses for the majority of claims for that given site. We recognize that these documents, these site profiles, Technical Information Bulletins, Technical Basis Documents, have holes in them

and in some instances there were sections that were reserved. But they enabled us to get started on dose reconstruction as soon as we possibly could for those claims. The point here is that we view those old claims as our legacy claims.

Up until mid-- mid-2006, July of 2006, we thought we were going to be able to achieve a point in our processing of claims where we'd have no claim in our hands over a year old. That did not come to be. There were a variety of extenuating circumstances that -- that prevented that from happening, but we're still dedicated and we're still concerted in our efforts to try to work off the oldest claims or our legacy claims. It's --

DR. ZIEMER: Larry, I'm going to interrupt you a minute. Someone on the phone lines has got music playing. They may have -- they may have gone onto a -- a standby mode or something. If any of you on the phone have music playing, please mute your phone. Probably the person who's got it playing is -- okay.

MS. MUNN: Is it -- it is in the phone, it's not in the speaker system?

DR. ZIEMER: No, I -- has it gone away? Okay.

DR. ROESSLER: Paul, this is Gen. It's making it almost impossible to hear on the phone, but I think they've left.

DR. ZIEMER: They may have gone on to a --

DR. ROESSLER: They may have taken a break or something.

DR. ZIEMER: Yeah, we --

DR. WADE: Well, what we could do is we could ask you all to hang up and then we'll re-establish the call.

DR. ZIEMER: Is there a way to do that? Can everybody hang up, then dial in again?

DR. WADE: Let's wait one minute. Is the music still there?

DR. ZIEMER: Yeah.

(Pause)

DR. WADE: Okay, I'm told that if you hit zero and get the operator, then you could ask the operator to disconnect that line.

(Whereupon, several speakers, off microphone and unidentifiable, made suggestions on how to resolve the issue.)

(Pause)

DR. WADE: That's -- work sometimes, sometimes

it doesn't. Life is like that, though, you know.

(Pause)

DR. WADE: I don't hear the music anymore. Is the music --

DR. ZIEMER: I don't hear it anymore, either. Is it -- is it gone? Okay.

DR. WADE: Larry?

MS. MUNN: Gen should be able to --

DR. ZIEMER: Gen, are you still on the line?

(No responses)

Gen Roessler, are you on the line?

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Oh.

DR. WADE: So that's how we can't hear.

(Pause)

DR. WADE: Okay, we got a thumbs-up. Gen, are you on the line?

DR. ROESSLER: I am on and it -- I -- it (unintelligible) --

DR. WADE: Has the music stopped?

DR. ROESSLER: The music stopped. It's the best sound we've had all day.

DR. ZIEMER: Great, okay.

DR. WADE: Thank you.

DR. ZIEMER: Okay, Larry will continue then. Thanks.

MR. ELLIOTT: Okay. Well, I was -- I was trying to address an issue about timeliness and dose reconstructions, and in that I'm -- and I'm reporting to you that we have a set of old cases that we call legacy cases. And our efforts on those, if we report out an average time under those cases to complete a dose reconstruction, we see that taking around 966 days, on average, which is too, too long. And this is one of the numbers that was reported out in the health committee meeting.

If we look at the current claims, those that are defined as coming to us after July of 2006, then our average time to complete a claim under dose reconstruction is 159 days, and that's where we want to be, or less. And so we're developing goals and objectives right now for this new fiscal year that we're going to put in place to address both the legacy and the current claims, and try to improve timeliness in both regards.

This next slide shows, in a curve form, the

claims that have been sent to us by the Department of Labor for dose reconstruction, and that's shown in this -- I don't -- a light blue line, I guess, that runs this way. And then the draft dose reconstruction reports that we have sent out are shown in this green -- pale green line. And the final dose reconstruction reports, after we hear back from the claimant that they have no further information to provide, is shown in red. What I want to point out for you here is we are now in a new phase where we're building another backlog. We're seeing more claims come in than we are sending dose reconstructions out. That is due to a variety of things, one of which is the funding constraints that we operated on in the last three quarters of Fiscal Year '07. And also another thing would be some of the increase in recruiting of claims that DOL has done. That's worked against us in that regard, but we certainly welcome those claims so that we can work on them. So there's a variety of factors. We're attentive to this backlog that's building right now. We're anxiously awaiting a -- a contract to be awarded for a

new contract support, and once that's in place we feel that we'll be able to get back up to a capacity that we had realized in 2006.

This graphic shows you, in increments of 1,000 claims, from the -- from zero to 1,000 and then 1,001 to 2,000, that kind of a framework, the status of the claims within those 1,000-case categories. And here we're showing that in the purple, those are the SEC cases that would be found in that representative group of tracking numbers. The yellow is those that are administratively closed at this time. The cases that are pended are in this lime green, and the cases that are active are in this yellow or mustard color. And then the cases that have been pulled are in red, and that leaves the cases completed in this light green-gray. So that just gives you a depiction by increments of 1,000 of our progress in working through these claims.

I'll talk a moment about our reworks. Reworks are another process stream of claims, if you will. This is a set of claims that comes back to us from the Department of Labor. Typically, in the past, these claims represented in this

grouping in the first quarter -- in the quarters from 2003 until the second quarter of 2007, represent by and large demographic issues associated with the claim. A new survivor, new cancer, additional employment, something has been found regarding the circumstances of the claim that requires us to rework that dose reconstruction. Very few of these represent a technical change in the dose reconstruction approach.

What you see here at the end of this graphic where there's a major increase or substantial increase in reworks that have been returned to us, these are the PERs that are coming back to us and we'll talk about those in a moment. But primarily this first batch here are super S, highly insoluble plutonium P-- Program Evaluation Review cases that we have to look at.

As you know, we approach the Department of Energy with requests for individual monitoring information for each claim, and this slide depicts the number of outstanding requests as being 553 as of the end of December, 2007. We monitor our requests to DOE on an every-30-day

basis, follow up with them on where they're at on pursuing this information, what can they tell us about that pursuit, are they ready to close it down, are they ready to provide it to us. So we report out to you the number of 170 here that are outstanding in excess of 60 days. And primarily the bulk of these come from -- from two DOE operations office areas that represent a number of sites. There's a -- in this 170 the Oak Ridge operations office has custody of 124 of those that are over 60 days, representing different sites -- K-25, X-10, Y-12. The Mallinckrodt folks are also included in this, there's a couple of those. And Paducah and Portsmouth Gaseous Diffusion Plants, so it's not just one site. They're sprinkled -- those 124 are sprinkled across those sites.

The second most prevalent operations office that has custody of outstanding requests more than 60 days is Chicago Ops Office, and that represents the Argonne National Lab East and West, as well as the Lawrence -- Lawrence Berkeley Laboratory. So there's -- there 24 -- or 22 claims represented by that Chicago

operations office.
We've tried to give you some insight at each Board meeting on where we stand with our efforts on developing appendices for Technical Basis Documents 6000 and 6001. And in your October Board meeting in Naperville I think the numbers were considerably higher. We've learned as we've proceeded through the development of these appendices that it may be wiser and more time-efficient if we just treat the few dose reconstructions that have to be treated, without spending time to develop a full-blown Technical Basis Document appendices. So the numbers that you see here on this slide have dropped from that slide I presented in Naperville.
Right now we have 15 site appendices completed. We have three others that are in review for TBD-6000. For TBD-6001 the number has dropped to five, and all five are completed. And we don't have any others that we envision we'll be putting forward for review or finalization.
Talked a minute ago -- introduced the -- this Program Evaluation Review, which is done whenever we identify a technical change in our

dose reconstruction approach that would increase dose for a claim or set of claims. And when that happens we write up this Program Evaluation Review. There are 32 of these. You can find them on our web site. And right now those 32 would represent around -- this 13,077 is somewhat an inflated number because many of these claims might be affected by multiple PERs. So once we look at a claim, we'll rub it off against all PERs pertinent to that claim, and that number is, again, over-inflated. We're not sure exactly what the total number is, but we're working through those.

We know to date that the number of claims that have switched in their compensation decision -- in other words, because of a Program Evaluation Review and a change in our technical approach, we've seen 157 claims move to a compensable state by DOL based upon a change that we've initiated. Primarily this 157 is represented -- I believe 154 of them are lymphoma claims, and the Board is looking at the PER on lymphoma and how we processed those claims against that one. The other three, I don't know exactly what -- one was a Bethlehem Steel, I think.

But by and large, we're seeing the PERs result in no change in decision for the work that we've done to date; 5,380 claims with no change, and there's 7,540 that are in the process of review and evaluation to determine if a change will occur.

We'll move now to the Special Exposure Cohort classes, 25 Special Exposure Cohort classes have been added since May of 2005. Of those, we break those down into 16, or 59 percent, are proc-- have been processed through the 83.13 process. This is where a petitioner petitions. As you've heard today in the Mound, we've had two petitions from people who felt that they needed to have a clearer explanation of how we could do dose reconstruction, or identify for us where we cannot.

Nine of these 25 classes that have been added were done so through the 83.14 process. And that's where NIOSH has determined, through the normal dose reconstruction process, that we cannot reconstruct the cla-- the dose for a given claim and we establish a class around that claim, as you heard for the Livermore petition today.

These 25 classes represent workers across 19 sites, so some sites have more than one class. It represents also around 1,500 potential claims the Department of Labor are determining eligibility for.

I want to spend a little bit of time in the next three slides speaking about the quality assurance and quality control program that has been instituted at NIOSH in processing these claims. I don't think we give this enough conversation time in Board meetings, and we're trying to do more of this. But essentially, you know, from day one we've had a very rigid quality assurance/quality control program.

It's in everybody's job description to work on improving the content and quality of a given claim, as well as a dose reconstruction that is produced in that effort. So we have quality control processes that are imbedded within the dose reconstruction approaches, and we have technical documents that are used to complete those dose reconstructions.

An example of a quality control process in that regard would be that there are three independent reviews that are performed once a

draft dose reconstruction is completed by a health physicist, and that includes a peer review within the structure. If it's a contractor who's providing the dose reconstruction, they have a peer review process that the draft is put through. And then there is a technical review of that dose reconstruction done at NIOSH by NIOSH/OCAS health physics staff. And then there is an OCAS approval where the -- the senior leadership and management of OCAS approve the final dose reconstruction. So we -- we have that in place.

There's quality assurance programs in place that identify, document and correct program deficiencies. An example of these would be our evaluation of the individual cases where -- where we run the cases through an automated program at night on our computers and they identify certain typographical errors or issues that -- that need to be brought to the attention of our public health advisors. And corrections or steps are taken to make those corrections made where we find deficiencies in the information that is given to us.

By the way, our public health advisors are next door. They are holding interviews. This is typical to what we do at each meeting, and so we're seeing quite a few claimants come in to avail themselves of that opportunity.

There are mechanisms that are in place in our quality assurance and quality control programs that ensure that corrective actions are implemented to correct any problems or any deficiencies or any reoccurrence of a problem that -- that we may have experienced. All findings and all concerns that are identified in our internal assessments require that there is a documented corrective action plan in place, and these can be viewed.

We track and we trend the performance, and the feedback channels are put in place to let folks know how they're doing with regard to the quality of their work.

2007 was a tough year. It was a tough year because we went through a series of continuing resolutions which impeded our budget and funding of our contract support folks. We -- we have seen our tech-- prime technical support contractor, ORAU and their teaming partners, go

through a very difficult time where lately we've been working with about an every, you know, three or four-week time frame to put more money into their contract to keep momentum going. We can't infuse the whole contract to gain capacity, as we would like, because we're limited under a continuing resolution process with looking at a daily expenditure rate based upon a prior year, not recognizing that we have additional work that needs to be done that we didn't have the prior year. So this has been very problematic and I can't say enough about our contractors and the support they've given us during the difficult times, but 2007 sure didn't leave us -- the Fiscal Year 2007 didn't leave us where we expected to be. We really thought we would be at a steady state where we defined steady state as no claim in our holdings over a year old, and we didn't make that. So again, we'll set new goals and do everything we can to try to achieve those goals.

Let's see, I didn't talk about this, this -- there's an automated program -- I did mention that in the other slide. I'll just pass over

that.

Let me finish up here with where we're at with our contract award process. There was a Request for Proposal -- this goes out in the (unintelligible) business daily, and people can look at that and provide proposals against that. That happened in May -- May of 2007 and the proposals were all due back in June, by June 15th, 2007. One might say well, why is it taking so long? Well, there's an extensive evaluation process that -- that is ongoing, still ongoing. We have a technical review panel at NIOSH that looks at the technical merits of each proposal, and then a program grants office has another set of reviews that have to occur, and that's the final stage and that's where we're at right now. The program grants office -- procurement grants office is working through the last efforts on their review.

To avoid interruption in service and -- and to provide continuity of service to the government and to these claimants, the ORAU contract has been continuously extended. It originally expired in September 11th, 2007 and we've -- I

don't know how many mod-- we call them contract mods to extend them, but we must have done six or eight now since September. And that, again, goes back to the difficulty we've had in just maintaining a level of effort, a capacity level, if you will, of the work that needs to be done.

I think that concludes my presentation. I'd be happy to answer questions if you'd like.

DR. ZIEMER: Well, thank you very much, Larry. Dr. Melius has a question.

DR. MELIUS: Yeah, but -- actually a number of questions. First one is on that slide -- can you explain the third bullet? I'm just -- response to review -- is it...

MR. ELLIOTT: Well, part of the process is we -- each of the proposers are enabled to ask questions about the scope of work, about the -- the request for proposals.

DR. MELIUS: So -- so it's --

MR. ELLIOTT: And based on those questions, we realized -- as well as we were in a -- a situation at that point in time where we realized hey, we're going to have more PERs, we're going to have -- it looks like we're

going to have more SEC stuff going on, we've got legacy cases we want to treat separate from current cases, and so we revised -- based on the questions and based upon the circumstances at the time, we amended the -- the scope --

DR. MELIUS: Okay.

MR. ELLIOTT: -- so that all proposers could bid on the same scope of work. These questions are traded so that the answers that are given to the questions are shared with all proposers. Does --

DR. MELIUS: Yeah, so --

MR. ELLIOTT: -- that help?

DR. MELIUS: Yeah, so it's really to proposers' questions. I was thinking it was somehow the reviewers, people reviewing the proposals --

MR. ELLIOTT: Well, yeah, that happens, too. The review -- this says the reviewers' questions, and that -- that happens, too. Our reviewers come up with a set of questions for a given proposal that result in oh, well, let's make it a level playing field for all proposers, and we'll tell the other proposers what the --

DR. MELIUS: Okay.

MR. ELLIOTT: -- what the reviewers' question was, so --

DR. MELIUS: Okay.

MR. ELLIOTT: -- there -- there's a two-edged sword here, and I believe this bullet says it was the reviewers' questions resulted in amended proposals.

DR. MELIUS: Right. My second question’s regards Department of Energy. We've had problems, particularly at the Hanford site, because of the continuing resolution in terms of access to data. Is that now resolved or being resolved? Can you tell me the status of that, or is that something I should ask --

MR. ELLIOTT: We're working with --

DR. MELIUS: -- DOE tomorrow?

MR. ELLIOTT: We're working with Department of Energy on those -- those issues of -- they, too, are feeling the brunt of continuing resolutions and limited resources to put at a problem. We've worked with DOE and we've worked with SC&A to help prioritize the requests that we have in front of Hanford folks. I've not had a briefing of late that says there's not progress there, so I'm hoping

we're on the -- we're now going to be in a new -- you know, we're not going to be under a continuing resolution. We're going to soon be under an omnibus where all of the money for a given year will be allowed to be committed.

DR. MELIUS: As of 4:00 o'clock Friday in a call with your staff, I don't think people knew the status and whether it was resolved or not, so I'd appreciate --

MR. ELLIOTT: Well --

DR. MELIUS: -- appreciate knowing whether it's being resolved or isn't being resolved and what the timetable for that is then. I mean is --

MR. ELLIOTT: That may be a better question to ask DOE right now, I --

DR. MELIUS: Oh, okay. Well --

MR. ELLIOTT: I don't know.

DR. MELIUS: -- (unintelligible) about that. My --

MR. ELLIOTT: I haven't been told that we -- we -- we've run into a major obstacle right now.

DR. MELIUS: Yeah, okay. Well --

MR. ELLIOTT: Nor have I heard from SC&A that there's a major obstacle.

DR. MELIUS: The -- the -- your staff was going

to check and try to figure out -- I -- do that. My third question is regarding the -- the first 5,000. My -- my recollection, either from the hearing or possibly from some subsequent discussions, were that you were going to look at those initial 59 that are left over -- you know, from the initial five -- 59 among the first 5,000, to look at issues related to whether they were -- I thought they were going -- actually going to be turned into 83.14s was the --

MR. ELLIOTT: Nobody made a commitment to that. We are looking at those 44 with regard to what can be done to move them through the process. If there is an 83.14 situation there, that's the way they'll be processed. If there is a dose reconstruction approach that's available to us, that's the way they'll be processed.

DR. MELIUS: So for the record, those go back what, five years now that those --

MR. ELLIOTT: Those -- those --

DR. MELIUS: -- requests --

MR. ELLIOTT: -- 44 that are still hanging out there --

DR. MELIUS: Yeah.

MR. ELLIOTT: -- yeah, some of them go back --

DR. MELIUS: Okay.

MR. ELLIOTT: -- a good ways. They're older than we want them to be.

DR. MELIUS: Well, yeah. Not a question but a comment. I mean I -- that really is, I think, to the point of absurdity now that someone cannot get a answer to their -- get their pro-- claim processed in over five years in this program, and I think it --

MR. ELLIOTT: Duly noted.

DR. MELIUS: -- certainly would call for a re-look at -- and -- at -- at the whole -- whole process and -- and why that can't take place. My final question is regarding the QA/QC program. I believe that early on in this Board's lifetime we -- we took a look at your QA/QC process, I think produced a short report with some recommendations. At that time it was in the process of being developed, many of the procedures, and -- and so forth. And I think -- I mean I share with you that it's an important part of the process and -- and I think it would be worthy of some time spent by this Board in -- in looking at that process

again now that it's matured and -- and is -- is in place because in some ways it's I think a very important safeguard to --

MR. ELLIOTT: I agree.

DR. MELIUS: -- what goes on, so I -- I would certainly put forward that's something to be considered for, you know, further -- in more detailed presentation at -- at one of our upcoming meetings and think it would be you -- useful and helpful.

MR. ELLIOTT: We can certainly devote a special presentation on QA/QC.

DR. ZIEMER: Let me jump in here just a moment, Jim, and ask Larry -- are the QA/Q-- is the QA/QC process enveloped in specific procedures that, for exam--

MR. ELLIOTT: They are in some instances, and those are -- those can be reviewed, if they haven't been reviewed.

DR. ZIEMER: Because if -- if they are, perhaps Wanda's workgroup might be in a position to look at those as a starting point. I don't think we've looked at any QA/QC procedures.

DR. WADE: Perhaps we can start with NIOSH making a presentation --

MS. MUNN: We haven't.

DR. WADE: -- of the overall process.

MR. ELLIOTT: Yeah, I think that would be good, because some procedures that don't speak to QA have a QA/QC component.

DR. ZIEMER: Right, so some may have been covered indirectly with -- yes.

DR. MELIUS: Since Wanda didn't slap me around when I mentioned that, I figured I was okay, but I -- I agree that I'm -- I think starting with an overview makes sense and -- not proposing a full-scale review or anything at this point 'cause -- again, very well some of it may be covered in procedures, some of it --

MR. ELLIOTT: We -- we would --

DR. MELIUS: -- may not even be warranted, but -- but I think we really should try to understand where that process is now and -- and context. I also think it has some implications for our review of individual dose reconstructions and what we focus on in -- in that process also and we ought to --

MR. ELLIOTT: We'd be --

DR. MELIUS: -- do that, yeah.

MR. ELLIOTT: -- happy to do that. We'd

welcome your review of that. I think we hear a lot of public comment about letters that are inaccurate or misplaced and -- and we want to be able to stand up and say, you know, those are our letters, we'll take responsibility for those. If they're not our letters, we're not -- you know, we're going to help work with the claimant to get the right -- the right party involved to get the corrections made.

DR. WADE: So I'll pencil that in for the April meeting.

MR. ELLIOTT: Okay.

DR. ZIEMER: Did that complete --

DR. MELIUS: That was my four, yep.

DR. ZIEMER: Thank you. Then we have Josie.

MS. BEACH: Larry, I just have a question on the automated program on slide 18.

MR. ELLIOTT: Uh-huh.

MS. BEACH: Can you give me an idea of what percentage of the potential discrepancies that catches, and is that a procedure-driven?

MR. ELLIOTT: I -- I'll have to get back to you on -- with an answer on that question. I don't have the numbers right here at my disposal, and I believe yes, there is -- I believe there's a

procedure --

MR. GRIFFON: Do you know --

DR. ZIEMER: We'll follow up --

MR. ELLIOTT: We'll have to do that. But yeah --

DR. ZIEMER: -- on this issue. Mark?

MR. GRIFFON: Yeah, just --

MR. ELLIOTT: -- it's -- it's automated, so you know, I'll have to -- I'll have to get back to you with an answer.

MS. BEACH: Is --

MR. GRIFFON: Along the same lines -- I was going to follow up on that -- you mentioned 55 discrepancies that it -- the automated program checks for --

MR. ELLIOTT: The 55 individual things it checks.

MR. GRIFFON: For example, do you know what -- I mean can you give me an example of --

MR. ELLIOTT: Date of birth wrong --

MR. GRIFFON: Okay.

MR. ELLIOTT: -- name's wrong, you know, is the cancer and the ICD code compatible.

MR. GRIFFON: Okay.

MR. ELLIOTT: Those are the kind of automated

checks that go on in this system, and that's something we can certainly make a presentation on in this -- this overview.

MR. GRIFFON: Thank you.

MS. BEACH: And one more question, is that part of your QA system?

MR. ELLIOTT: Yes.

DR. ZIEMER: Other comments, questions?

(No responses)

Okay, thank you very much, Larry. We appreciate the update, as usual.

We will have a 15-minute break, after which we will have a public comment period from 5:00 to 6:00.

(Whereupon, a recess was taken from 4:43 p.m. to 5:00 p.m.)

PUBLIC COMMENT

DR. WADE: (Reading) Policy on Redaction of Board Meeting Transcripts

(Public Comment)

1. If a person making a comment gives his or her name, no attempt will be made to redact that name.
2. NIOSH will take reasonable steps to ensure that individuals making public comment are aware of the fact that their comments (including their

name, if provided) will appear in a transcript of the meeting posted on a public web site. Such reasonable steps include:

a. A statement read at the start of each public comment period stating that transcripts will be posted and names of speakers will not be redacted;

b. A printed copy of the statement mentioned in (a) above will be displayed on the table where individuals sign up to make public comment;

c. A statement such as outlined in (a) above will also appear with the agenda for a Board meeting when it is posted on the NIOSH web site;

d. A statement such as in (a) above will appear in the Federal Register Notice that announces Board and Subcommittee meetings.

3. If an individual in making a statement reveals personal information (e.g., medical information) about themselves, that information will not usually be redacted. The NIOSH FOIA coordinator will, however, review such revelations in accordance with the Freedom of Information Act and the Federal Advisory

Committee Act and, if deemed appropriate, will redact such information.

All disclosures of information concerning third parties will be redacted.

If it comes to the attention of the Designated Federal Official -- that's me -- that an individual wishes to share information with the Board but objects to doing so in a public forum, I will work with that individual in accordance with the Federal Advisory Committee Act to find a way that the Board can hear such comments.

DR. ZIEMER: Okay. Thank you very much. With that, let us begin then with Antoinette Bonsignore, if I pronounce it --

DR. WADE: Bonsignor, uh-huh.

DR. ZIEMER: -- Bonsignor, I think representing Linde.

MS. BONSIGNORE: Good afternoon, everyone. I'm Antoinette Bonsignore. I'm representing the Linde Ceramics facility in Tonawanda, New York. And I'm here to discuss an issue that -- that came to light on September 5th of this year when the Department of Labor issued a bulletin that has redesignated four of the five MED

buildings from the operational period at Linda in the 1940s. And as a result of this redesignation, these four buildings have been redesignated from an AWE facility to a DOE facility, and as a consequence of that, any of the workers who worked in those buildings during the residual radiation time period, which is from 1954 to the present, are no longer eligible to pursue claims under the Part B program, either under the dose reconstruction program or under a Special Exposure Cohort petition that was being prepared for the residual radiation time period. And the only building that remains defined as an AWE facility for that residual time period is one building, Building 14. And as a result, the workers that I have been representing over the past three years have been effectively eliminated from even elig-- eligibility to submit claims for any radiogenic cancers that they are pursuing under the Part B program. And I -- I -- I'm here to express their unequivocal objection to this redesignation on a number of points, primarily because, first of all, the bulletin was issued without any notice

to any representatives fro-- from the facility, any of the work-- none of the workers had been notified that anything like this was happening, not wa-- was anyone who was in the middle of appealing a claim that may be affected by this redesignation provided any notice. And more importantly, the bulletin that was posted on the Department of Labor's web site is a very -- a very superficial document that does not provide any -- any explanation as to the reasoning behind the redesignation, any kind of legal reasoning, any kind of technical reasoning in terms of the residual radiation in those four buildings as opposed to the one remaining building. And we simply ask the Board to evaluate this -- this situation in light of the fact that the Linde claimants simply are in a state of limbo and have been blindsided by this decision, and we simply don't know what exactly NIOSH is going to do in reaction to this bulletin, whether this bulletin will be used as a discretionary document, whether NIOSH is legally required to adhere to this decision, whether there is any opportunity or -- or possibility for an appeal

of this decision, or whether the decision is final and there's no -- no opportunity for any type of appeal from any claimant or from anyone representing the claimants.

DR. ZIEMER: Thank you. I -- I do want to ask if any of the NIOSH people can answer that last question. I -- I think I know the answer to it and I think the -- I think it is a DOE and DOL issue. I -- I don't think NIOSH has a sort of an option or discretion on this, but I don't know if -- if Larry is here or if legal counsel from NIOSH is here that could answer that.

DR. WADE: Well, I think --

DR. ZIEMER: Liz, I don't know if you heard that question or not.

MS. HOMOKI-TITUS: Sorry, I did not hear.

DR. ZIEMER: The question was whether or not the -- the redesignation of the -- the -- part of the Linde facilities by Labor and -- and DOE -- if that decision -- following it is discretionary on the part of NIOSH. I said I didn't believe NIOSH has the discretion to ignore that, that they have to follow that designation. Is that not correct?

MS. HOMOKI-TITUS: That is correct. NIOSH

would be bound by Department of Labor/Department of Energy's decision there because that is specifically delegated to those departments.

DR. ZIEMER: Yeah, so it -- it may -- as a first step, may be very important for -- for you, in representing those petitioners, to make that view also known both to -- I mean it sort of indirectly gets known through this, but I mean to formally make sure that both Labor and -- and DOE hear -- I -- I would say directly from you, as well.

MS. BONSIGNORE: Thank you. And -- and in light of that, since representatives from NIOSH are here, what are -- what if any options do we have in terms of appealing that decision or having that decision reviewed by any -- anybody at the Department of Labor or at the Department of Energy?

DR. ZIEMER: Let me ask if any of the Labor representatives here know the answer to that -- or Liz, can you address it at all?

Okay, Liz, on behalf of NIOSH --

MR. CLAWSON: Dr. Ziemer --

DR. ZIEMER: Uh-huh?

MR. CLAWSON: -- they're both out in the hallway and I sent Sam out there --

MS. HOMOKI-TITUS: I was going to say I'm not sure I can give an answer. All I can tell you is that would be a Department of Labor or Department of Energy -- that wouldn't be appropriate for this Board or NIOSH to address.

DR. ZIEMER: We'll -- we'll try to -- to get you together with -- at least with Jeff from Labor, and maybe he can give you an answer, so --

MS. BONSIGNORE: I -- I woul-- I've -- I would appreciate that because I've been having --

DR. ZIEMER: 'Cause I -- I don't know myself and I'm not sure even the NIOSH people know exactly what the appeal process is. Larry, were you going to speak to this or...

MR. ELLIOTT: I'm sorry, I was out of the room.

DR. ZIEMER: The question was really on the redesignation of Linde, which is done by DOE and DOL --

MR. ELLIOTT: Right, that's the AWE to DOE or DOE to AWE, I --

DR. ZIEMER: Yeah, but --

DR. WADE: AWE to DOE.

DR. ZIEMER: -- does -- does Labor have an appeal process for that? I said I don't think we know.

MR. ELLIOTT: You'd have to talk to Labor about this particular decision.

DR. ZIEMER: Yeah, we need to get her together with Jeff, if he's still around.

DR. WADE: I would also suggest that when the representatives of Labor and Energy speak to this Board tomorrow, if a Board member would like to raise the question I think that would be appropriate.

MS. BONSIGNORE: I -- I -- I won't -- unfortunately will not be available here tomorrow. When -- can -- could I get some idea as to when that discussion would occur before the Board so I could --

DR. WADE: It's scheduled right now for between 1:30 and 3:30 tomorrow, Wednesday.

MS. BONSIGNORE: Okay. And finally, I'd like to submit a written statement for the record.

DR. ZIEMER: Sure.

DR. WADE: Thank you.

MS. BONSIGNORE: Thank you. Thank you very much.

DR. ZIEMER: Sherman Jenkins, Lawrence Livermore. Sherman?

MR. JENKINS: My name is Sherman Jenkins and I was at Lawrence Livermore for 32 years; I'm retired. I'd just like to point out something that I found, and that is that -- not just at Livermore but at a number of sites -- the data from the monitors -- site monitor, radiation monitors and the personal de-- dosimeters have, over apparently many periods of time, been lost. They've been adjusted. And from the records that I see from -- on the computer and from your records, very little in-- information that would pertain to that or that would address that. And it seems to me that it's kind of systemic, and I -- I'm going to be looking to see if you address it any further.

DR. WADE: Okay.

DR. ZIEMER: Okay. Thank you. Dan McKeel, and Dan represents several groups, but -- Dr. McKeel, welcome.

DR. MCKEEL: Thank you, Dr. Ziemer. I can't get that down. Anyway, good afternoon, I'm Dan McKeel. I -- tonight I'm representing the Southern Illinois Nuclear Workers, and my

comments tonight focus on the Board's reduc-- revised redaction policy which was posted on OCAS on December the 12th and on the status of General Steel Industries dose reconstructions. With respect to the redaction policy -- get this down where you can hear me -- comments from Board members during the November 27th conference ca--

DR. ZIEMER: Dan, there's another thing down lower, you can just -- yeah, get that down -- there you go.

DR. MCKEEL: Great, all right. Terrific. Comments from the Board members during the November 27th conference call indicated approval of this redaction policy without need for modifications of it. The policy was posted on OCAS, as I said, on December the 12th of last year. In the November meeting the sentiment was expressed by several Board members that the revision should satisfy those objecting to the new policy. Since I was one of the lead people for this issue, I need to respond to make our remaining concerns known to the Board.

First, there is no proposed remedy for those

transcripts that have already been redacted. The April 19th and 30th workgroup and the May 2nd through 4th, 2007 and June 11th through 12th full meeting transcripts were affected. The fully July 17th through 19th, 2007 Board meeting transcripts have not yet been posted on OCAS. The July 17 subcommittee transcript was redacted. The October 7 to 9 Board transcripts were posted and have not been redacted. A link to the November the 27th teleconference meeting transcript was posted on January (sic) the 24th, was inoperative as of this morning, January the 8th. Thus it is unclear whether or not the July full meeting transcripts will or will not be redacted. I wonder why the July Board transcripts have been delayed, as I understood Dr. Ziemer to say they'd all been received from the court reporter, Ray Green, during the November 27th meeting.

Second, because the redaction transcripts have not been restored to their unredacted form, the public record for the redacted period remains incomplete and inaccurate. The omission of participant names, those who make public comments, and the names of the Dow and Rocky

Flats SEC petitioners and workers commenting on the SEC petitions is a gap in the official historical record of the ABRWH proceedings. Personally, I do not want the record left this way because I believe the original policy was improper, for reasons our group has previously communicated to the Board and to the Senate Health Committee in detail.

Third, the redaction policy posted on OCAS mentions public comments only, whereas the redaction process was also applied to the participant list and to my DOW SEC presentation on May the 4th, 2007.

Fourth, although I and our advocates group have repeatedly asked for the sources of the original redaction policy to be identified, this has not happened. We continue to believe this is very important, both for this program to be perceived as transparent and because several sources have been identified. One was the Board itself. Another were staff members at HHS, CDC and NIOSH. And the third was the CDC ATSDR FOIA office in Atlanta. This confusion needs to be clarified as to the correct attribution of the original redaction

policy.

Then I had just a few comments about the G--General Steel Industries. The main area of concern for GSI is the urgency of obtaining the SC&A review of Appendix BB and their review of the detailed comments that I made and [name redacted] made of Appendix BB. It should be noted that our names were also redacted from the versions of their Appendix BB critiques posted on OCAS. I want this redaction reversed as well. The impact and acceptance of these concerns are reduced by having our names omitted. Again, this redaction policy is contrary to our intentions. The Appendix BB scientific critiques are a form of public comment. NIOSH in fact solicits comments from the public pertinent to its technical documents on the public docket portion of the OCAS web site.

We are aware of at least five GSI claims with POCs in the 48 to 49 percent-plus range. We urgently need to have released the results of the review of the GSI Appendix BB that the Board tasked SC&A to perform. During the SC&A satellite meeting before the October 9th, 2007

NIOSH outreach meeting in Collinsville, Illinois for GSI workers, a consensus was worked out that the average GSI work week was 65 hours rather than the 46-hour average that NIOSH has used in GSI dose reconstructions thus far. This fact, coupled with the inclusion of a neutron dose, the added dose from the three high MeV gamma sources, the fact that not one but four two-hour Betatron exposures were required to generate X-ray images of Mallinckrodt uranium, collectively may well be sufficient to have many of these borderline POCs pushed to or over the 50 percent compensation cutoff limit.

We also look forward to receiving the minutes of the two October 9th, 2007 Collinsville meetings for the GSI workers, and we await the results of the application of PER-24 that applies to some GSI claims submitted by workers from the sister Granite City Steel site.

We have not yet gotten an answer whether NIOSH or SC&A have retrieved and reviewed the Landauer, Incorporated film badge dosimetry data on 30 GSI workers, and that data applies to the year 1963 to 1973.

Thank you very much, and I -- I do have a copy of these remarks for the Chairman.

DR. ZIEMER: Thank you very much, Dr. McKeel. Incidentally, we -- we will have on Thursday -- let me look here -- an -- an update -- I myself had hoped that we would have a -- the report from our contractor on GSI, and I know that SC&A had hoped to finish that report prior to this meeting. It is -- the draft is very close to completion. We will get a report on the status of that tomorrow, and hopefully we will all have --

DR. MCKEEL: Well, good.

DR. ZIEMER: -- that draft very soon.

DR. MCKEEL: I didn't realize that that was on the agenda.

DR. ZIEMER: Well, it is, because we -- we have -- we will have an update on all of our --

DR. MCKEEL: Good.

DR. ZIEMER: -- various workgroups and so on, so --

DR. MCKEEL: That's great.

DR. ZIEMER: -- I've asked John Mauro -- is John here in the room? And -- well, it's all right, Arjun. John has asked the author of

that report to be with us by phone to -- on Thursday to give us a report, at least on the status of the SC&A review of the GSI program, so --

DR. MCKEEL: Tha-- that's excellent.

DR. ZIEMER: Yeah.

DR. MCKEEL: Thank you.

DR. MELIUS: Paul?

DR. ZIEMER: Yes?

DR. MELIUS: In our -- I see in our Board working time on the agenda for Thursday there's also further discussion of redaction and transcripts and minutes, so will that be those -- I mean I'd like to get an answer to some of these questions that Dan's had, so...

DR. ZIEMER: Yes, and --

DR. WADE: That will be the time.

DR. ZIEMER: -- that would be a good time --

DR. MELIUS: Okay.

DR. ZIEMER: -- I -- I think the concerns that were raised are recognized by many on the Board as well.

DR. MELIUS: Thanks.

DR. ZIEMER: Dr. McKeel is a very patient person and will have to continue to be patient

and we'll see what can -- can come of it here. Patty Cook.

MS. COOK: Good evening, Dr. Zimmer (sic) and members of the Board. I am Patricia Cook, claimant [identifying information redacted]. My mom worked at NRDS for PanAm August 1963 to December 1970. I would like to comment on a few more of the experiences I've had with NIOSH and DOL -- thank you -- which further shows claimant unfriendliness.

The last time the Board was here in Las Vegas, after the public comments Larry Elliott sat right in front of me and turned around to me and said he would reopen my mom's file. After six months went by I sent him an e-mail for an update. This was the response I received. (Reading) Dear Ms. Cook, my notes from Las Vegas meeting indicate that I committed to look into your claim to verify whether the phone interview was lost and not included in the record for the claim. This was relative to your comment that the interviewer was sloppy and lost the record of the interview, and that the interviewer had been fired for this. I did find the interview report included in the claim

file. My apologize -- apologies for not letting you know the outcome of my review. Also I am sorry if you were confused about a reopening of the claim. I did not commit to a reopening. An issue of an interview report not being in the claim file is not cause to reopen a claim; thus I would not commit to such. Be that as it may, I do not see anything in the claim file that leads me to believe that something was done improperly in the dose reconstruction that would merit reopening of the dose reconstruction. Our work on your claim provides a scientific basis to say that your mother's cancer was caused by something other than radiation exposure she encountered at the Nevada Test Site. Respectfully, Larry.
I find this very rude and condescending, telling me that I must be confused. If he could not have reopened the case, then he sure did a good job of misrepresentation. I also asked for a total administration file on disk, which I believe every claimant should request from NIOSH. I did receive it.
My mother died of multiple myeloma. I had given all the doctor's diagnosis way in advance

from 2001. Until I received my first DR in May 2005 there was never a question that multiple myeloma wasn't her primary cancer. I hit the roof when I saw the primary cancer was deleted by a person from the Department of Labor. Because of this wrong diagnosis, I had to start over with another phone interview after Department of Labor informed NIOSH that there was -- indeed was medical evidence that the primary cancer was myeloma. The second dose reconstruction was ordered, and they changed the primary cancer to the myeloma and put the lung cancer as secondary, like it should have been from the start.

As I went through the documents on my disk that I received from NIOSH, I received it this April, I found two e-mails. The first one was dated December 2nd, 2003. This is about the time they started the first dose re-- reconstruction. This looks like an internal e-mail. It says (reading) Chris, I sent you an ANRSD (sic) deleting the multiple myeloma only. I did not delete the secondary bone cancer. The bone cancer still stands as the secondary because there is no identified primary. It is

my understanding that we are to report the secondary cancers when there is no primary. Thanks, Ann.

Ann writes back (reading) Received ANSRD (sic) today deleting the secondary cancer. There is no primary cancer listed. Please advise. Should the claim be pulled or provide primary cancer information. Thanks, Chris -- Chris Negell*.

So the multiple myeloma had been removed back in 2003. Now all these years I thought it was still the primary until I received my first dose reconstruction in 2005. Why did Department of Labor remove the myeloma in the first place? From what I understand, Department of Labor -- their role in the dose reconstruction process is to plug the numbers into the IREP model only, not delete primary cancers. Department of Labor is the reason why the first DR didn't have its primary -- didn't have the myeloma as its primary.

Then there is a second e-mail dated August 17th, 2005. This is the time the second dose reconstruction was started because I said they had the cancers wrong. This is dated August

17th, 2005. (Reading) Stu, I have reviewed information from the Seattle DO regarding the DR for Irene Halverson*. Ms. Halverson was employed at the Nevada Test Site from -- dates and dates. The DR was performed for secondary bone cancer with the lung as the assumed primary cancer site diagnosed 3/19/97 -- oh, correct that date, February 1997. The resultant POC was 25.01 percent. Upon further review of the medical information of the case file, the DO was determined that the medical evidence supports the primary cancer for the metastatic bone cancer is multiple myeloma, ICD-9 Code 203, not the lung cancer as previously assumed. We are requesting that NIOSH rerun the dose reconstruction to reflect the correct primary cancer, multiple myeloma, 203, diagnosed 2/19. The Seattle DO will forward an amended NRSD to NIOSH shortly with the information discussed above accordingly. I am asking for a rework of this DR.

No coincidence that this is when I told them that they had made a mistake on the first DR. And the second DR came back showing that the multiple myeloma as primary. Now we have a

very big problem here. This looks to me like intentional attempt to change the facts in my mother's records. I won't accept that either one of these DRs is accurate. I think it's more than just sloppy work. It's deliberate tampering.

Plus this site profiles have many mistakes in them that are well acknowledged by DOL. Right here in our local review journal -- God bless [name redacted] -- not just the Nevada Test Site, but all of the other sites as well. For example, the BREN tower was not included in Area 25 at NRDS. That's huge. My case alone is enough to cast doubts on NIOSH's ability to reconstruct accurate dose reconstructions for all claimants because of flawed data. Thank you.

DR. ZIEMER: Okay. Thank you very much. Next, Teri S-e-p--

MS. SEPULVIDA: Sepulvida.

DR. ZIEMER: -- Sepulvidz (sic), thank you, Teri.

MS. SEPULVIDA: Hello. [name redacted] and I have been attempting to receive compensation on behalf of our deceased father, Robert

Sheltran*. He was a dedicated fireman at the Test Site from August '85 to December of '89. Before that he was a retired Captain for the City of Las Vegas for 20 years. He worked for REECO with Q clearance. He was a first responder. He went when and where they called him, no questions asked. No matter what caught on fire -- grass, outbuildings, et cetera -- he was there to respond, as all dedicated firemen do.

He was diagnosed in August of 1990 with polycythemia. In February of '91 he was diagnosed with mouth cancer. Eight months later, in October of '91, he passed away at the age of 57. In -- excuse me. In January of '02 [name redacted] and I applied for compensation through the program. Two years later, in June of '04, we received our first denial based on a probability of causation of 33.51 percent. We of course appealed this decision to DOL. May of '05 Department of Labor agreed with us and remanded our case back to NIOSH based on a revised dose reconstruction software for polycythemia, and had noted that with this new revision our probability of causation would be

above 50 percent. Two months later NIOSH denied the remand and strangely recalculated the probability of causation to 3.06 percent. We appealed again in September of '05. We were denied again almost a year later in August of '06.

At this time we had asked for our case to be reopened. At this time we attempted to find more evidence to strengthen our case by requesting fire incident reports at the Nevada Test Site through the Freedom of Information Act. We received a letter from the Department of Energy regarding our request through Freedom of Information, stating that the fire incident reports were missing from 1987 through 1992. May of 2007 we received our denial to reopen our case. I've recently checked with the Department of Energy, and they still do not have these records.

Coincidentally, my case is being reopened -- or so they say -- because of the super S plutonium out there.

But my question to the Board is if I can't have access to evidence in support of our claim, how can they have evidence to the contrary? And I

do have copies of the letter from DOE for all the Board members and a copy of an e-mail from the person at DOE when they were trying to find them.

DR. ZIEMER: Okay. Thank you very much. Next we'll hear from Anne Snyder. Anne?

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Okay. Then Dorothy Clayton. Dorothy?

MS. CLAYTON: Yes, my -- my name is Dorothy Clayton, and you may remember that I spoke before the Board at the last meeting here in Las Vegas. At that time I presented five years of employment history, including declassified records of -- that I had gotten from the DOE on my husband's employment. My husband was Glenn Clayton. He worked at the Nevada Test Site for 29 and a half years, and he died with six different types of cancer.

In October of 1998 Glenn wrote a 10-page work history which details the -- the -- a portion of the work that he did in the tunnels where the nuclear tests were conducted. The words of a dying Nevada Test Site worker tells how he

and his crew and others worked in areas where the level of radiation was extremely high. Eight months after he wrote this, on June the 5th, 1999, Glenn died.

If I gave you a copy of this just to read, you might doubt that his memory was -- was very good. But several months after Glenn's death I got 1,370 pages of declassified records from the DOE and I -- if anyone from the DOE had taken a close look at those records, I doubt very much if they would have ended up in my hands, but they did. So I brought some of the -- I'd like to read just a couple of things that -- that Glenn wrote in the work history, and then show you some declassified radiation monitor logbook records. They're handwritten, and they all have been declassified.

But on page 1 of the work history Glenn says (reading) We had very little success of containment in the tunnels in the years from 1958 to 1968. During that period of time some severe radiation problems existed for the personnel.

Then talking about another one of the -- one of the tests that he was involved in, he said all

of -- all of the ones working in there, they worked in the very high radiation, and they got quite a bit of exposure in that area. I won't go into detail on these shots that he worked on, but I -- on page 4 he talks about working in E tunnel. He said they wanted to do some mining re-entry -- "they" meaning LRL. He said as we mined back through the Logan area we encountered seams in stratus that were exceeding three R, and our only means of protecting ourself from the radiation was by trying to put lead shielding over these areas. In the logbook record, rad safe logbook record, they report that there was a build-up of contact reading on the floor of the work area up to four R and LRL requested lead shielding be put over the areas. This was the day shift they were talking about. They -- and the next notation was (reading) the swing shift were round up same and bring out when they come. Just a few lines down it said (reading) the grave shift arrived and was briefed.

So we're looking at three different shifts here that worked in high radiation area with no protection, three crews.

Another notation they made up here, they were informed of persistent rise in thyroid reading on -- and I won't give the employee's name.

And on the next page they say (reading) there is still an iodine problem deduced from samples taken.

These are the rad safe logbooks. After that Glenn went to B tunnel. (Reading) LRL, in conjunction with Sandia, had determined they wanted to create a sphere at the bottom of a shaft which would be code named -- blank -- and would be a five KT high-explosive test. One thing that we encountered was that no one, including rad safe, knew the amount of radon thoron radiation. Later I was in the B tunnel area when the rad safe monitor told us that the radiation from radon thoron was exceeding 250,000 counts.

After that, LRL made a determination that they wanted to re-enter the -- another area in B tunnel. He said (reading) One thing we found out much later was that the radiation we were dealing with back in that tunnel, the experimenters called "boil"*, but it was in truth tritium, and it was at a very high level.

None of us were aware of this and we all got a good dose of tritium. LRL had a crew taking three urine samples each week, and they fed us salt tablets to assist in getting the radiation out of our system. Sometime after this, rad safe, in conjunction with the AEC and others, started giving us each a six-pack of beer to drink after work.

He did another -- worked at E tunnel again, and they -- where they had a secondary explosion that blew out the portal, the rad safe monitor reported that the water in the drainage pond just off the dump at E tunnel was reading 72 R. Shortly after that it was suggested by a rad safe supervisor that he lose his film badge. That was a common practice that they did during that period of time when a worker would get so much radiation in -- in -- like in a month's time, they would tell them to lose their badge or they would lose their job.

In the rad safe notes, someone had called from the lab, LRL, and said that we should get some lost film badge cards. Why do you think they needed more cards?

I wanted to share these records with you

because they confirm the radiation hazards that was present in the tunnels where these men worked. Tonight in this room there are former workers here who have cancer who can't get their claims paid, and yet they were in Glenn's crew, they worked with him. There are widows here whose husbands worked right along with my husband. They were in his crew. Their claims have been denied. They're being denied mostly probab-- because they can't get records like this. After I got these and went to Washington and lobbied for this program, the DOE stopped giving out the records. They can -- and the ones they give out now, like the radiation exposure history, does not show the radiation that these men got because I have the tests on my husband's -- the urine tests, the nasal swabs -- and they show extreme radiation, which is not included in the dose reconstruction -- the -- I'm sorry, in the radiation exposure history that I was given.

And not only that, the widows -- everyone is told that -- remember, as the claimant, it is ultimately your responsibility to submit the necessary information to substantiate your

claim under the EEOICPA. This is from the Department of Labor. There's no way they can substantiate their claims. They don't have the records. They're -- they're not being given them.

So I respectfully ask the Board to grant Special Exposure Cohort status to the Nevada Test Site so these workers, who freely gave their all -- they gave everything they had to give -- in order that we could win the Cold War, and they need to get these claims paid. Thank you.

DR. ZIEMER: Thank you very much. John Funk, is John ready?

MR. FUNK: (Off microphone) (Unintelligible) switch with Brenda here.

DR. ZIEMER: Okay.

MR. FUNK: (Off microphone) (Unintelligible) her spot.

DR. ZIEMER: Okay. Brenda --

UNIDENTIFIED: Sieck.

DR. ZIEMER: I got it, okay. Brenda?

MS. SIECK: Good evening, ladies and gentlemen. Can I just hold this? My name is Brenda Sieck and I'm here to talk about my father tonight,

Ronald C. Bain. Here's a picture of him in his younger days when he was in the Air Force, and he is on the far right -- big guy -- in a hat. He served in the Army and the Air Force for our country. He also worked for the government at the Nevada Test Site for many, many years. Our family has had a claim with U.S. Department of Labor for my daddy's death for almost 30 years now. This is unacceptable. And the families want to be done with this and compensated for losing their loved ones in this room.

My father was an awesome man. He died of horrific cancer that ate his body away due to the extreme amounts of radiation that he was exposed to while working under the tunnels and various other places at the Test Site. My family has been through a very long, frustrating journey with the government trying to get the information we need.

Over the years we have had many friends die to cancer from working at the Test Site with my father. The only friends that are alive that we know of are [name redacted], who is here in the room tonight, and [name redacted], who lives out of town, who both are still suffering

severe health issues from working at the Test Site with my father.

Even though we have documents and go back and forth with letters, the government still refuses to acknowledge our men and women who gave their lives to work at the Test Site.

Excuse me. [name redacted], who lost the great love of her life, has been filling out forms for many years -- too many. The claim form that especially interested me that I was looking over was claim form number EE-2 for survivor benefits, asked questions that my mother could not answer because she did not know the answer. Questions like number 6 on page 3 asked did he participate in a urine, fecal or breath biological radiation monitoring program. Question number 7 asked do you have copies of his dosimeter -- if I'm saying that right -- badge or biological monitoring records. She did not know. She did not have access to this. Question 8 asked was he ever res-- restricted from the workplace or certain job duties because he had reached a radiation dose limit. So tell me, how do we get this information that you're asking for? However,

there was one question asked that she did have an answer for, and it was question number 9. It asked was he ever involved in an incident involving radiation exposure or contamination. [name redacted] wrote down yes. [name redacted] mentioned being in hot spots all the time, and that in 1978 he was overdosed with radiation and had to be decontaminated at the end of his shift in the Emad in area 400. To this day we still have not received a response to this.

There were so many other times when he came home and took off his clothes outside before coming into the house in the back yard because he was exposed and did not to put his clothes with our family's clothes.

In closing I would just like to say thank you for listening to me tonight 'cause I'm here be-- for [name redacted] because she cannot handle reading the paperwork and being refused anymore so I'm taking over for her, and she lives with me now. I just pray that the government does the right thing and takes care of these families who have suffered great losses in their lifetime, and I would like to leave you a

copy of an interview with a young man from the Department of Labor dated January 2005. He had no knowledge of even what the Test Site was. I believe his name is [name redacted]. This gives a lot more information at what went under the tunnels as my mom had [name redacted] sit in an interview and that's when we really found out what happened to my father. Thank you.

DR. ZIEMER: Thank you very much, Brenda. [name redacted]?

(No responses)

Okay, how about Annie Padilla or Padilla -- looks like Padilla -- P-a-d-i-l-l-a.

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Okay. Denise Brock -- I know Denise is here.

MS. BROCK: Hello, everybody.

(Pause)

I -- I do have a couple of statements from claimants they've asked me to read. One lady was here earlier today but had to leave, and another lady just could not make the trip and has asked me to read the statement she has written, and I'll start with hers first.

Presentation statement for Advisory Board meeting, Las Vegas, Nevada 2008, written by [name redacted] on behalf of [name redacted], surviving spouse of [name redacted].

(Reading) I first learned the existence of the Energy Employees Occupational Illness Compensation Program Act of 2000 while talking to a coworker in Chattanooga, Tennessee. We were both from Oak Ridge and, like many other children growing up there, had parents who worked at the nuclear weapons plants. She told me about the federal government passing a law that was supposed to help compensate Energy workers who had developed catastrophic illnesses as a result of their employment in the nuclear plants. I remember thinking, my God, someone is finally going to recognize the sacrifices that my father and thousands of others made working at those facilities.

My father worked at Y-12 nuclear plant on the Manhattan Project during 1944 through 1946. I still have the framed certificate they so graciously presented to him. He left Oak Ridge, and then returned to Y-12 in 1953. He was never told of the dangers of working in a

uranium enrichment operation and had no idea what working in such an uncontrolled environment was doing to his health.

He began having health issues in the early to mid-1960s, which steadily worsened. My family watched my father die a long, agonizing death as his body slowly deteriorated over a 10-year period. He suffered from cancer, coronary heart disease, arteriosclerosis and God knows what other radiological-induced illnesses. He lost one leg, and then the other, and ultimately his life when he finally succumbed to bladder cancer. My father was 67 years old at the time of his death, and he had the body of a 90-year-old.

[identifying information redactd].

In 2001 I filed a claim on behalf of [name redacted] with the Department of Labor under the EEOICPA, requesting survivor benefits due to my dad's employment. For years now we have provided every piece of documentation requested of us. We have spent hours and hours talking with many different people who represented whichever government agency happened to have the claim at the time.

Finally in February 2006, after five years of waiting and following the claim as it was bounced between agencies, we received a favorable recommendation from the Department of Labor. We were elated. The notification advised that this was not the final decision and that it still needed to go before the Final Adjudication Branch, or FAB, for their review and the issuance of the final decision. The letter advised that if we agreed with the recommended decision to sign and return the waiver enclosed and we should hear soon from FAB. We were sure it was just a matter of a rubber stamp, but it was not to be.

We anxiously awaited further instructions, only to receive a remand order eight months later from the FAB. You can't imagine how disheartening and emotional it was to read the Seattle District Office will undertake further development of the evidence as it deems necessary. The letter stated we should be advised of the new recommended decision. However, another year passed and we heard nothing.

I contacted the Department of Labor office and

was told that they no longer had the claim, that it had been forwarded back to NIOSH for further investigation. Six years this has been going on. I couldn't believe this was happening all over again.

We contacted NIOSH for help in understanding what was going on. Interestingly, I ran across the following while researching the EEOICPA. Executive Order 13179 providing compensation to America's nuclear weapons workers, December 7th, 2000 states, and I quote, While the nation can never fully repay these workers or their families, they deserve recognition and compensation for their sacrifices.

Since the administration's historic announcement in July of 1999 that it intended to compensate DOE nuclear weapons workers who suffered occupational illnesses as a result of the exposure to the unique hazards in building the nation's nuclear defense, it has been the policy of this administration to support fair and timely compensation for these workers and their survivors.

DOE news, July 27th, 2001 -- Our goal is to take care of the men and women who were harmed

as quickly as possible, said Secretary -- Labor Secretary Elaine Chao.

My sisters and I lost our father, but my mother lost her husband, her best friend, the love of her life. He died way too young. He didn't get to spend any golden years with my mother, or be there to guide his children as young adults or share the laughter and love of his grandchildren. [identifying information redacted]. We have been waiting nearly seven years now for someone to stand up and do the right thing. We have met all the clinical and administrative criteria. My father's tenure at Y-12 certainly was well beyond the 250-day requirement under the Y-12 Special Exposure Cohort. My question to the Department of Labor and NIOSH is, when is this claim going to be paid? I find it hard to believe that when Congress passed Executive Order 13179 they considered seven years to be fair or timely. This is so wrong. Someone needs to make it right and it needs to be today.

I would like to just add a statement, if I could, to this. I've been working with this -- this lady and her mother for a little while

now, and this -- among several cases I've been running across at the Y-12 site. And NIOSH is working with the Department of Labor to resolve these, but these are very disheartening for me. When you see a worker that has a 90-year-old surviving spouse, 90 years old, and has had this claim sitting for over a year, and she had a recommended decision of approval -- this man had over 250 days, one of the 22 cancers. But the problem with it is is that there's a question of whether or not it was in a radiological area. If this is the claim I'm thinking of -- because I have several -- this man had bioassay, so I really am at a loss here as to what the problem is.

This is from [name redacted] for [name redacted], and I'll just go ahead and read -- she's got a list of things here -- is that all right for me to do this, and this'll be my last one.

(Reading) [name redacted] was at the Nevada Test Site frequently from 1957 through the late '60s as a bomb assembler and handler. He wore a film badge for radiation all the time, as directly related by him. Traveled from

Albuquerque to Las Vegas to work at the Nevada Test Site many weeks from 1957 to 1960.

On Monday morning my mother took him to the airport until late Friday night when Mom and I picked him up at the airport. No accounts made of this. Our family lived in Tonapah from 1960 until '63. We were told unless we had an affidavit, that wouldn't be accounted for. I found my school records and all of a sudden records showed Dad worked at the Tonapah Test Site.

He told us he -- he told us of going from Tonapah Test Site to the Nevada Test Site to set up, monitor, and clean up after the tests. Again we were told unless we have affidavits, it would not be accounted for. I found a gentleman that worked with Dad and gave us an affidavit upon seeing Dad working at the Nevada Test Site on several occasions, including the Sedan test. This was the next test -- to the largest test and broke out into the atmosphere 12,000 feet, releasing serious radiation, the worst of all tests. Dad was then instructed to go to Ground Zero to do work 24 hours after the blast. How well was he protected at that

point?
All of a sudden, times show up on the records of him working at the Nevada Test Site.
Stories Dad directly related to us, he was asked on several occasions to take off his badge when he had too much radiation and continue to work, even to go to Ground Zero right after a test. When he knew he received too much radiation, the lab results from his badge came back as lab malfunction, or such.
He and others he worked with were getting really sick from the radiation poisoning and were told by Sandia nothing was wrong.
Right after our family was moved back to Albuquerque Dad had to have his thyroid removed because of growths. That is known to be directly related to radiation exposure, yet this is not giving any -- given any recognition because it wasn't cancerous. Dad had melanomas and precancerous nodules removed, and died of pancreatic cancer that spread into the liver from all the radiation.
You have placed our dad there for a short time, but he was there and assembling and handling bombs much longer. We have proof he was there

those years, yet the dosimetry records have mysteriously disappeared for the years of the greatest radiation. Where are all the dosimetry records for the 1958 through the 1960s? In our observation from how we've been treated, the records from those most radiated were quite obviously destroyed or hidden until the family's able to prove their family member was in the affected areas, and then miraculously records show up. Each time we find more evidence, the dose reconstruction records are copied and pasted, lowering the allotted amounts previously, pasting in a small amount of the new exposures, still leaving us under the 50 percent mark. And allotting compensation based on dosimetry records is futile. Those records are altered, not available, hidden, lost, or destroyed.

I have a Review Journal newspaper article about a woman working at the Nevada Test Site that one day came in and asked what happened to the boxes of old records that had been stored in a certain room. She was told they were such old records they weren't needed anymore and were taken to the dump. Shouldn't people be

concerned about the coverups during those years?

We are frustrated because we have all this proof and he died of radiation. Also we can't seem to get help. We would really appreciate help in this -- with this and for you to include the years he was working with the bombs, radiation, and the Sedan Test. Thank you for your help. [name redacted].

Thank you.

DR. ZIEMER: Thank you, Denise. Okay, I've got Dorothy Clayton again, but Dorothy, you already spoke to us so -- somehow you ended up here twice.

[name redacted]?

UNIDENTIFIED: That's Brenda.

DR. ZIEMER: Brenda, okay. I'm having trouble reading the -- okay, so Brenda has -- we've already heard from, so we hear from Mr. Funk.

MR. FUNK: Good afternoon, Dr. Wade, Dr. Zimmer (sic). Last night I -- Dr. (sic) Presley let me sit on their working board's meeting and I had an opportunity to raise some issues about the Technical Base (sic) Document and the site profile. And later on I -- today I was talking

to Dr. (sic) Presley and I didn't -- I told him I didn't think that they put much stock in what I had to say, and his remark to me was well, the issues I had raised are in the site profile, and were. And I would like to address the Board in this part that yes, it is in the site profile, but it's not in the technical -- it's not in the tables. The dose reconstructor -- what -- what use are the tables if you don't use them?

I think the HENRE experiment should be in the tables. I think the BREN tower being mislocated needs to be addressed. I think the super kugala* needs to be in the tables. And I would also believe that the tweezers and there's a couple more out there floating around, too. I understand some -- maybe Atlas. And now you just can't mention these -- the dose reconstruction form says these for the purpose of dose reconstruction. I hardly see how you -- just having the name of it in the document is sufficient for the dose reconstructor to work with.

Now I'll get off of that for the moment. I'll go -- go on to another subject.

As you've seen that these ladies all come up here, they all have a common denominator. They cannot get records. Spouses and wives cannot get information. I had one lady's a friend of Dorothy Clayton, she came to one of my meetings and she said did I know anybody worked with her husband. And I said I don't know, what was his name? She told me his name was [name redacted]. It so happens that [name redacted] worked in my shop, so not only was I able to tell her who her husband worked with, I gave her a photograph of everybody he worked with and named them all.

Now why should that woman have to wait five years and only by accident find out who her husband even worked with? And this is the problem that these girls have been facing.

Now the other night at that working board meeting I seen something very peculiar. What it was, one of the claimants has filed a claim which was -- admit it'd be colorful, I won't say any more than that, and NIOSH and the -- and DOL and whoever else -- and DOE's involved, too, went over and worked overtime in the library and they come back with a set of

records on this man. They knew every minute he was on the Test Site. They knew every single move he'd made, all the way back to 1960. They didn't have any trouble finding his records. And what was even worse, when they couldn't find a record, they fabricated one.

And that was at -- the case with the picture. They were showing -- here, we have critical -- we have state of the art radiation detection stations, look at this. I looked at the picture. First thing I seen, they was talking about a 1960s issue. I see DOL on his hat. DOL didn't exist in 1960. Next thing I seen, I seen a badge, which was a 1982 badge. So I asked Dr. Wade to ask their consultants, who were also -- believe it or not, they're -- the ones that was your consultants were the ones that caused most of the problems out there. Now they're working for you. But he asked him when the picture was taken; he said 1982. And I raised the issue, what are you doing with a 1982 picture talking about a 1960 situation? Now this is one example of what we're talking about. These -- when they want to find records, believe me, they can find them. And

they trashed that poor man last night and I hope they're ashamed of themself (sic) for what they did, because they don't have to take this one person and make a poster boy out of him and to paint the entire group that worked Nevada Test Site with this one incident. And I think the man should have had a -- an opportunity to respond, to retract his statements or to understand the gravity of it without -- and when I asked one of your consultants back there why he -- they would do such a thing, he told me because it was easy. That's his exact remarks, because it was easy; we knew we could get this one.

Now this is the kind of people you're hiring for consultants. That was the Oriental gentleman, he's from LLL. And like I said, these are the people that caused the problems at the Test Site in the first place, and now you've got them working for you. And I'm going to find out just exactly why they're working for you, 'cause every one of them's in conflict of interest, should not even be involved in this any way, shape, nor form. Thank you.

DR. ZIEMER: Thank you, Mr. Funk. Now actually

I think there is a [name redacted] here because his name is at least written down separately from Brenda's -- may not be here, but can you confirm that that's -- that's this one right here. I want to, again, give an opportunity if there is such a person.

DR. WADE: I think that's Brenda.

DR. ZIEMER: Well, here's Brenda's right here, and this -- this is S-p-e-- well, I -- I suppose you could be down there three times, Brenda, but it's -- okay.

Michael -- looks like Brewskie.

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Actually your -- your -- I looked at your e-mail address. I like that Brewskies there --

MR. BREW: Yeah, well, (unintelligible) 'cause my name is Brew.

Okay, my name is Michael Brew. I worked at the Nevada Test Site in 1982/83 as an apprentice -- I think -- yeah, maybe '81, I'm not sure. I can't remember; it's been several decades.

I also worked out there at the DAF, the Device Assembly Facility, and then I've also worked

out there recently from 2/25 of 2001 to September of 2004. And I'm not sure -- I -- I feel this is the -- is the correct forum for what I have to say because I've been to the Test Site for a number of years, and I can concur with some of the things that have been said up here -- with this lady over here about the tunnels.

Working on T tunnel myself on the last shot -- what was it called, Mighty Oak, does anybody remember -- yeah, it was called Mighty Oak. Well, it was supposed to be 150 kiloton blast. Well, they said it hit water and it magnified it to -- what, 750? -- 750 kiloton, and the Russians were pissed off. Okay? There was a big to-do about that. What, it vented the doors. Right?

Okay. Eight people went on re-entry. Seven of them are dead of cancer already. I went in a week later. Okay? Now there's no half-life that goes a week. Does anybody know of one? Okay. My radiation badge said zero for the year. Seven people that went in a week before me were dead. The dance hall had collapsed all the mater-- all the -- all the -- all the ma--

the oscilloscopes and the cameras to a two-foot high section. Do you remember that? Does anybody here recall that?

UNIDENTIFIED: (Off microphone) (Unintelligible)

MR. BREW: Okay, you worked on Mighty Oak. Okay. So -- you remember being pulled out on a sled through the doors -- and the doors vented. Okay? The -- mesa collapsed and electrician was killed, and I forget the name of the rad safe girl, she -- her ankle was broken when it collapsed. They were above it at the time, but it did vent.

When we worked in Area 12 we were bused from the camp up to the tunnels, and we were told never to touch any of the materials that you saw along the road, especially the E tunnel door that was blasted all the way across from E tunnel to the other side of the road, and it was imbedded in the mountain right there.

There was metal, there was wood, there was -- you name it, there was stuff all over the place from the -- from when those places vented.

We were told out there that all the radiation was ground-bound -- I think that's what they

called it, ground-bound or something like that, it was in the dirt and it wouldn't move. But yet I saw a 1,000-foot dust storm come at us up into Area 6 -- all right? -- when I was working there. At no point in time has my badge record ever said I got anything at all.

I've been to -- is Baneberry or Sedan crater? Which is the one you can drive up to?

UNIDENTIFIED: Sedan.

MR. BREW: Sedan, and it's what, 120 at the top -- 120 rems?

UNIDENTIFIED: Yeah.

MR. BREW: Yeah, it's 120 rems at the top. We sat there for an hour looking at it. Our badges showed nothing -- or the report was nothing, one of the two.

Okay, and here's my final little thing for this. It's really bothering me. It's about the reporting. Okay? This is what it's all about, it's the reporting and that you take the contractors -- whoever it is, REECO, LLNL, Bechtel, whoever -- you take their statement, a report, and say okay, you know, you don't have cancer from radiation 'cause it says zero, zero, zero. Oh, okay.

Now I -- I have here my 2004 reporting dosometer (sic) record right here -- right? -- the full report. Except there's one problem. I've got my badge that this report covers. Now can you tell me how in God's world -- in God we trust -- that a company could issue a report covering that year and never see the badge? Is that possible? No. Is it morally correct? No. I worked at Nevada Test Site because I believe in America. I didn't work out there to be dosed and not taken care of.

I'm lucky. For some reason, God has kept me alive. But I've got the badge -- here it is, the real McCoy.

I talked to the Inspector General through [name redacted]. They went out and investigated this. Do you know what the Inspector General from Washington, D.C. said about this? Well, because you have not gotten any radiation from prior works or whatever, we assume -- quote -- that you haven't gotten any radiation from, you know, this period.

Okay. You haven't had a car accident in 15 years? I assume I shouldn't have to wear a seat belt then. Right? No, wrong. Wrong,

yeah? You know what I'm saying? The assumption is that there's no radiation out there that I can get involved in. Yes, there is. There's the Sudan (sic) crater when the dust blows up out of it all over the Test Site. They buried Cadillacs and cars and stuff from when that did -- when that -- when that -- because it was so -- caused so much radiation. Those things were unusual. Okay?

I was in Area 5 all the time, working in Area 5 -- okay? They have high level waste out there and it's in a blue tent sitting on concrete. But you know, a wind storm come up and fractured the -- the concrete of the blue tent. The stuff can't be any closer than three to five feet or it starts to react. They're burying low radiation waste out there all the time -- in the ground. Area 5 is -- that -- is -- is where the people sat up on the hill and it goes -- boom -- you see that all the time. These sitting there, the -- the benches are still there, and that's where we were working. But I got no dose.

So what I'm putting forth to you is that when you're going back for records -- okay? --

'cause here's a record says zero; here's the badge. That's all I've got to say. If you want a copy of this, I'll give it to you but I need the original back. Here's a copy of the badge that I have. I'm not giving the badge up.

MS. BEACH: (Off microphone) (Unintelligible)

DR. ZIEMER: Yeah, we can -- we can get copies of that. Thank you very much and --

MR. BREW: (Off microphone) (Unintelligible) it's an emotional thing for me, too, because I've been to --

DR. ZIEMER: Sure.

MR. BREW: -- several agencies and they've all done the same thing. They've pushed me all on -- someplace else and said well, it doesn't matter. Well, it does matter to the American worker. Do we have loyalty for us or are we just a piece of meat -- and that's my bottom line, or not? We're American citizens and we should be respected as American citizens because we're the people the put these things together, not the corporate. The corporate just organized it. But we, the little ants, are the ones that do the work. And we're the

ones that need to be compensated and respected and looked at as citizens that have done something for this country and made it great. Without us, there wouldn't be this right now.

DR. ZIEMER: All right, thank you. Thank you. Lee Vaughn, is Lee here?

(No responses)

Okay. Sometimes people sign these when they think they're registering just their attendance, so that may have occurred.

I have, I think, a person by phone who wishes to speak. [name redacted], are you on the line from Denver?

(No responses)

Do we have anyone on the line?

MS. BARKER: Dr. Ziemer?

DR. ZIEMER: Yes, [name redacted], are -- is that you?

MS. BARKER: This is Kay Barker.

DR. ZIEMER: Oh, hi, Kay.

MS. BARKER: [name redacted] has asked me to make a statement for --

DR. ZIEMER: Okay.

MS. BARKER: -- (unintelligible), if you don't mind.

DR. ZIEMER: Yeah, that would be fine, Kay. Go ahead.

MS. BARKER: Can you hear me well enough, Dr. Ziemer?

DR. ZIEMER: I can hear you very well, Kay. Thank you. Proceed.

MS. BARKER: Good evening, Dr. Ziemer and members of the Board. My name is Kay Barker. [name redacted] couldn't make the call. She asked if I could submit our comments instead. I want to thank you for allowing me to phone in my public comments tonight on the Rocky Flats SEC petition.

I would like to talk about the 19 buildings which the Ruttenber report had neutron exposure but is missing from the SEC petition. Nine of those buildings are not even mentioned in the site profile. If NIOSH can't even get all the Rocky Flats buildings listed in the site profile, how can they claim that an accurate and claimant-friendly dose reconstruction is performed on the compl-- on the claim. I ask you, how can these claims be done accurately and fairly. There is no claimant friendly dose reconstruction being administered by NIOSH

here.
[name redacted] raised the issue that nine buildings were missing from the Rocky Flats site profile during the November 26th, 2007 Rocky Flats working group teleconference. I believe that Brant Ulsh stated it is not necessary to include all buildings in a site profile. When was that decided? Did the Board agree that only the major buildings should be identified? The nine buildings missing from the Rocky Flats site profile range from administrative buildings to plant security to maintenance and to metal fabrication. NIOSH doesn't think these workers in these buildings are worthy of inclusion in the site profile? How, then, are these workers dose reconstructed? I assert that it is quite possible that they are not reconstructed with reasonable accuracy. How could they be when the reconstructor doesn't even realize these buildings existed at Rocky Flats?
The employees not only wore the scrubs and whites in the hot areas, they also continued to wear these garments in the cafeteria, human services, and some even wore them home. The

RCs were usually too busy to monitor each employee as they left the hot area so removing the contaminated garment wasn't always done. There is no way to construct dose on employees who were contaminated in this way.

Not only is Rocky Flats site profile and SEC petition missing buildings, the same thing has happened at other sites. DOL -- DOL needed to issue a bulletin to correct the Los Alamos SEC because a building was missing. Nevada Test Site has an important radiological source missing from their site profile. Now explain to all the claimants at these three sites how their dose reconstructions have been accurate. You can't do an accurate dose reconstruction on a claimant who was in a building that you don't have a site profile on. I bet if you checked, you would find this is happening at all the other DOE sites as well. Don't worry, the word is getting out and the claimants at the other sites are checking onto this, too. I'm sure you'll be hearing from them soon.

Please don't continue to give all the claimants the lip service that there is nothing you can do and that you are bound by rules and

regulations set up for you by the President, as that isn't cutting it anymore. You do have the authority to overrule your June decision for Rocky Flats, if nothing else but for the lack of information given to you by NIOSH. You can and should correct your mistake of not granting a full and complete SEC petition to all Rocky Flats workers. As the verbiage goes, junk in, junk out, and it is exactly how the dose reconstructions are being done at all the sites, including Rocky Flats.

Just think about all the claims that now have to be remanded back to NIOSH due to missing buildings in petitions and site profiles. The NIOSH employees are getting rich at the claimants' expense and life.

Again, thank you for making this call possible.

DR. ZIEMER: Okay. Thank you, Kay, for filling in for [name redacted] this afternoon.

MS. BARKER: Thank you, Dr. Ziemer.

DR. ZIEMER: You bet. That now completes our public comment session for today. I will alert you that we do have a public comment session tomorrow evening at 7:30, and we'd be pleased to hear from others who may have comments at

that time. So we're now recessed until tomorrow morning when our session begins, and of course all of you are welcome to the regular sessions, as well. Thank you very much.

(Whereupon, the day's business was concluded at 6:20 p.m.)

1 **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 Jan. 8, 2008; 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 February, 2008.

_____

STEVEN RAY GREEN, CCR, CVR-CM

CERTIFIED MERIT COURT REPORTER

CERTIFICATE NUMBER: A-2102