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

convenes the

TWENTY-EIGHTH MEETING

ADVISORY BOARD ON

RADIATION AND WORKER HEALTH

DAY ONE

The verbatim transcript of the Meeting of the Advisory Board on Radiation and Worker Health held at the Adam’s Mark, St. Louis, Missouri, on February 7, 2005.

C O N T E N T S

February 7, 2005

TRANSCRIPT LEGEND

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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

ANDERSON, Henry A., M.D.
Chief Medical Officer
Occupational and Environmental Health
Wisconsin Division of Public Health
Madison, Wisconsin

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

ESPINOSA, Richard Lee
Sheet Metal Workers Union Local #49
Johnson Controls
Los Alamos National Laboratory
Espanola, New Mexico

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

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

OWENS, Charles Leon
President
Paper, Allied-Industrial, Chemical, and Energy Union
Local 5-550
Paducah, Kentucky

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

AGENDA SPEAKERS

(in order of appearance)

Ms. Heidi Deep, NIOSH

Mr. Shelby Hallmark, DOL

Dr. James Neton, NIOSH

STAFF/VENDORS

CORI HOMER, Committee Management Specialist, NIOSH
STEVEN RAY GREEN, Certified Merit Court Reporter

AUDIENCE PARTICIPANTS

AHIRA, KEN
ALEXANDER, OLIVE M.
ALEXANDER, TERRY
ALLEN, GEORGE
AMANN, DEBORAH
ANBLE, JOHN, KTVI
ARRO, MICHAEL R.
BAFARO, MARILYN, NIOSH
BASCHERT, BETTY J.
BEATTY, EVERETT RAY, SR., FERNALD ATOMIC COUNCIL
BEHLING, HANS, SC&A
BEHLING, KATHY, SC&A
BELL, R. THOMAS, SC&A
BERRY, CHARLENE
BEST, CHARLINE
BEST, RAYMOND
BIEST, JOAN
BLANKENSHIP, CINDY
BOGNAN, JOHN
BOYD, JAMES
BLOSSER, FRED, NIOSH
BRALASKI, RITA
BRAND, ANSTICE, CDC
BROCK, DENISE, UNWW
BROWN, THOMAS, BSCAG
BRYANT, DOROTHY
BULGER, HAROLD
CALLAWAY MOOCH, FERNALD ATOMIC COUNCIL
CAVALESKY, SHIRLEY
CHISHOLM, MILLIE
COFFELT, EVELYN
CONRAD, JAMES
COTTER, GARY
COTTER, WILLIAM D.
COVALESKY, SHIRLEY
CROCK, JAMIE
CURTISS, JOANN & RICK
DANIEL, GWEN
DAVIS, JANETTE
DAVIS, RICKY, KTVI
DEEP, HEIDI, NIOSH

DEICHMAN, MATT, WBII-TV
DILLARD, HOMER & HALENE
DOLAN, JACQUELINE E.
DOLAN, WILLIAM E.
DORNFELD, DEBBIE, JIM TALENT
DOWNS, DEB
DREY, KAY
DUDLEY, MARTIN
EATON, CLARISSA, UNWW
ECHEMENDIA, AIDA
EHLMANN, PAT, UNWW
ELLISON, CHRIS, NIOSH
ESPY, RICHARD
FAGAS, JANE
FITZGERALD, JOE, SC&A
FRISCHMAN, BILL
FULKERSON, ROBERT
GARNER, DON
GENERI, MARY
GILLARD, LORRAINE A.
GRAHAM, MAYOR, CITY OF O'FALLON
GREEN, JAMES
GREUBLATT, B., UPI
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HAERER, BERNELL
HALLMARK, SHELBY, LABOR
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HARRISON, KATHY
HART, ALISON, SENATOR HARKIN
HAWKINS, BRENDA
HEADRICK, WILLIAM
HEISTER, MELANIE, NCRP
HENNITS, DOROTHY
HERBERT, NICHOLE, NIOSH
HERTZ, DOROTHY
HINNEFELD, STUART, NIOSH
HOLLAND, MARTIN
HOLTMEYER-MAUNE, JERRINE
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HOMOKI-TITUS, LIZ, HHS
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IRWIN, SUE

IVERSON, SI
JOHNSON, MARY L.
JOHNSON, PAT
KATZ, TED, NIOSH
KELLER, LILLIAN A.
KELLY, PATRICK, SC&A
KENOYER, JUDSON, ORAU
KIEDING, SYLVIA
KIMPAN, KATE, DOE
KLOTZ, STEVE, KTRS
KOENEMAN, BARB, UNWW
KOENEMAN, RAYETTA
KOENEMAN, TANYA, UNWW
KORDING, GLENN
KORDING, SHARON
KOTSCH, JEFFREY L., DOL
KRAICHELY, MARY, UNWW
LACKEY, MELBA
LAMBKIN, DON, UNWW
LAVERY, KEVIN M., KWMU
LEA, JEFF, KMOV
LEACH, BOB
LEAHMANN, SHIRLEY
LITTLE, JAMES
LYNCH, CINDY
LYNCH, HELEN
MACK, HUY, POST DISPATCH
MAURO, JOHN, SC&A
MCINTYRE, JOAN
MCKEEL, DAN, MD, WASHINGTON UNIV.
MCKEEL, VIRGINIA, VILLAGE IMAGE NEWS
MCNUTT, ROBERT
MESSALA, DAVE & JAN
MILLER, RELADA L., NIOSH
MILLER, RICHARD, GAP
MITAS, JIM, CONGRESSMAN AKIN
MOUSER, TERRI, UNITED NUCLEAR
MURPHY, DAN P.
MUSCKE, EDWARD C.
NAES, NORVILLE
NESVET, JEFF, DOL
NETON, JIM, NIOSH
NOVAK, JUSTINE

NUGENT, MARY, US GAO
O'HARE, FRANK W.
OJEDA, THERESA, KMOV
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PHEGLEY, RAYMOND, AIRPORT
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PORTER, DIANE, NIOSH
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RACH, CHARLES L.
RAMSPOTT, CHRISTINE
RAMSPOTT, JOHN
REECE, DOYLE
REMPE, VIRGIL J.
RETKONSKI, RICHARD
REUSS, ANN
RINDALL, TINA, UNITED NUCLEAR
RINGEN, KNUT, CPWR/BCTD
ROBERTSON-DEMERS, KATHY, SC&A
RODE, BETTY
ROSENTHAL, JAMES
ROTH, CHARLES L.
ROTHROCK, AMY
RUTHERFORD, LAVON, NIOSH
RYAN, FRAN
SACKS-LONG, DONNA J.
SCHESLER, ELAINE
SCHNEIDER, CLARENCE
SCHNEIDER, MARILYN, UNWW
SCHRUMM, RUTH
SCOTT, SYLVIA
SEMARADI, ANDREW
SHANEHEN, JUDY
SOVAR, RICH AND EVELYN
SPICKETT, DAVID
SPICKETT, EVELYN
STEGER, RON
STEGER, RONI
STEINKAMP, JUDIE
STEMPFLEY, DAN, NIOSH
STROPES, FLO
STROUSSNER, DONALD A.
STUCKENSCHNEIDER, DOLORES

STUDT, ARLENE
SUERMANN, ZELDA
SULLIVAN, MICHELLE, WBII-TV
SWABODA, JAY, ST. LOUIS LABOR TRIBUNE
TASCHLOR, JOHN
TAULBEE, TIM, NIOSH
TEAGUE, CARLOTTA, NCRP
TENFORDE, THOMAS S., NCRP
THORNHILL, CHARLENE
THORNHILL, GEORGE
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TURCIC, PETE, DOL
TYNDALE, TINA
UNDERWOOD, LEWIS, NIOSH
VACEK, PENNY, SENATOR GRASSLEY
VERHOFF, GWENDOLYN
VOGNER, JOHN
WALKER, ED AND JOYCE, BSCAG
WATSON, DAVID P., JR.
WHITE, WALTER, JR.
WIESEHAUS, JOHN J.
WINDISCH, ANTHONY
WOLFF, TOM
WOODS, JANET
YERINGTON, LASCA
ZAK ROSEMARY
ZIEMER, MARILYN

P R O C E E D I N G S

(1:05 p.m.)

WELCOME AND OPENING COMMENTS

DR. ZIEMER: Good afternoon, everyone. I'd like to call to order the 28th meeting of the Advisory Board on Radiation and Worker Health. I'm Paul Ziemer, Chairman of the Board. The record will show that all of the Board members are here this afternoon, with the exception of Dr. Andrade, who is ill and could not make it; Dr. Anderson will be joining us later this afternoon by telephone hookup, who -- he's in Anchorage, Alaska today.

For those who were not here at the morning session of the subcommittee, I'd like to remind you of several things. First of all, the sessions this week are being videotaped by Louise McKeel, who's with Village Image, and so if you wonder what the taping is, I -- well, it seems to have disappeared, but -- maybe she got all the footage she needed, but I was going to mention that I was expecting the taping to continue throughout the sessions, and maybe it will.

We would request that if you have phones or

beepers that you turn them off while you're in the room here. We've had experience in the past where those have interfered with the proceedings and with the sound system.

Please register your attendance with us today, if you've not already done that. The registration book is at the entryway on the tables there.

Also there are a number of handouts at the back of the room, including today's agenda, as well as a number of related items that you can avail yourself of as you see fit.

Our Designated Federal Official today is Dr. Lew Wade, and Lew, I'd like you also to have the opportunity to make a few remarks at this point.

DR. WADE: Thank you, Mr. Chairman. I'd like to welcome you all and thank you on behalf of Secretary Leavitt*. While he's only been on the job several weeks, I know that he's aware of this Board and its deliberations and his need to interact with this Board. And also on behalf of John Howard, Director of NIOSH, but I don't have to do much of that 'cause John Howard is here and in the front row.

DR. ZIEMER: Welcome, John.

DR. WADE: Again, I think it's terribly important that the Director be here to hear the deliberations of this Board.

Let me explain to you why I'm in the chair. Larry Elliott has done a noble job of filling this role, but it's become ever more apparent that Larry needs to -- to sit in his chair as the OCAS director and interact with this Board on many important issues, and that would limit his ability to serve the role of the Designated Federal Official. So -- so I assumed that role so we can avoid either a real or an apparent conflict of interest that might exist between Larry in his role -- former role of DFO of this Board and his role as the director of OCAS. So I have the honor of -- of filling his position.

Just a couple of general comments. I think it is terribly important that -- that not only does the Board deliberate and pass motions, but that the Board also creates a very full record of its deliberations. I would encourage all Board members to be sure that their thoughts are included in this record. As we get into the business of SEC petition evaluation, I

think it is terribly important that that record be as rich as it can be. NIOSH is striving very hard to have a process that is transparent and inclusive of information and position and -- and let me start with the Board and ask you to see that that record is made as complete as possible.

That's all, Paul. Thank you.

DR. ZIEMER: Thank you very much, Lew. And in that regard, let me add a couple of comments, both as a reminder to the Board, as well as for information for the members of the public who may be here today, and that has to do with the voting procedures for the Board.

There are actually 12 voting Board members, including the Chair, which means that we actually do not have a mechanism for breaking tie votes. There are 12 voting members if all are here and present, and we do hope when we do votes this week that we will have both Henry and Tony available by phone. Our procedures to allow us to have others -- other Board members vote in that manner if the hookup can be made. But in any event, for particular motions to move forward where a majority is required, a

tie vote in essence results in the failure of the Board to reach consensus. I simply point that out and remind you of that.

Also I do want to point out that normally under Robert's Rules the Chair does not vote except in cases of a tie. However, this Board made it known early on in its own procedures that it wished to have the Chair vote in any event, so that in situations such as may be coming up where we have particular issues to vote on, the Chair's vote will be recorded, as well.

Lew, do you have anything to add on the voting to make sure that we have covered that appropriately?

DR. WADE: I think even with 12 and with the Chair voting, there is a mechanism to pass a motion and then to defeat a motion, and a six-six vote would defeat a motion.

I would again repeat that it's not just the motion and its resolution, but also the record that's created that's terribly important.

DR. ZIEMER: Right. Thank you very much.

NIOSH PROGRAM STATUS REPORT

We're going to proceed then with the agenda as you have it before you. The first item this

afternoon is the program status report from NIOSH, and Heidi Deep is going to bring that to us today. Heidi, welcome back.

And Board members, you do have in -- in your second tab, have copies of Heidi's presentation. And they are on the table, as well, for others who are here.

MS. DEEP: Thank you, Dr. Ziemer. Good afternoon. As Dr. Ziemer mentioned, my name is Heidi Deep and I'll be presenting the program status report for -- for NIOSH. The purpose of this presentation is to present to you the progress that we have made, both long-term and short-term.

This slide illustrates submittals versus production as of January 31st, 2005. The blue line represents the cases that we have received from the Department of Labor. As you can tell, there's been a downward trend. We've been averaging between 200 and 300 cases per month, short-term. In January 2005 this number dropped below the 200 mark.

The green line represents the draft dose reconstruction reports we sent to the claimants. This is an upward trend, and it

speaks for our production. And we've been averaging about 500 dose reconstruction drafts sent to claimants per month.

The red line illustrates the final dose reconstruction reports we sent to the Department of Labor. This again is an upward trend, and since we last met in December this number has increased. I will go in more detail about these figures in the following slides.

Since the inception of the program we've received a total of 17,912 cases from the Department of Labor as of January 31st, 2005. This chart breaks down the cases received by district office. The trend has not changed, for Jacksonville takes the lead at 36.7 percent, Seattle at 31 percent, Cleveland 21 percent and Denver at 11.3 percent.

These next few slides -- this is where I break down the numbers in the submittals versus production. This is the cases we've received from the Department of Labor by quarter as of January 31st, 2005, a quarter being every three months, quarter one equaling October, November and December. There's a downward trend here where we've maintained an average of 700 --

between 700 and 800 cases per quarter, equaling about 250 cases per month. You notice for quarter two for 2005 this only includes the month of January where we've only received 190 cases.

This chart illustrates the draft dose reconstruction reports we've sent to the claimants by month as of January 31st, 2005. This follows an upward trend, where you can see in the past seven months we've been maintaining an average of 500 Dose reconstruction reports -- drafts to claimants. This means that we are out-pacing the number of cases coming in and we're reducing a backlog.

This chart illustrates final dose reconstruction reports sent to Labor as of January 31st, 2005, again illustrating an upward trend. In January 2005 we reported a record month of sending out 529 cases to Labor. Although we did drop in December, this may be related to a number of factors as these figures are claimant-dependent, meaning that once we -- we have to -- in order for a final report to be sent out, we have to have the signed OCAS-1s, complete the closeout interviews for the dose

reconstruction final reports to be sent.
It's also important to point out that we have almost doubled the number of dose reconstruction reports we've sent in less than a year.
In terms of Department of Energy response to requests for exposure records, we've requested 17,827 exposure monitoring records for claimants, and then 17,332 we've received responses from Energy. In terms of age of outstanding requests, for 60 days or more there's 56; 90 days or more, 27; 120 days or more, 22; and 150 days, 57. It's important to mention that we maintain interaction between the Department of Energy monthly and keep up to speed on these outstanding requests.
This slide illustrates telephone interview statistics as of January 31st, 2005 where one -- cases for which at least one interview has been completed, 17,540. This is just one interview, where you can have -- it's important to point out that there can be multiple claimants on a case. And then the interview summary reports sent to claimants, this number is higher because it includes multiple --

multiple claimants on a case. It's 23,956, with only 475 interviews left to be conducted for claimants, but this number can also include -- could have less cases because of multiple claimants per case.

The number of interviews conducted as of January 31st, since October of '04 we've conducted between 300 -- 300 to 400 interviews monthly, but this number is decreasing as you -- as the number of cases coming in are decreasing.

Dose reconstruction statistics as of January 31st. The cases in pre-DR assignment, 9,498 -- pre-DR assignment meaning that we're depending -- waiting for information from Energy, employment records, CATIs to be completed and site profile documents. Cases assigned for dose reconstruction, 1,102.

These last two bullets it's important -- I'm going to point out a statistic -- when -- for NIOSH, we have completed 41 percent of these cases, so of the 17,912, that's 40 percent -- 40 percent of overall cases we've completed.

So with that in mind, draft DR reports sent to claimants is 662. The final DR reports

completed, 6,650, which also includes the administratively closed cases.

Cases completed by NIOSH tracking number. We expect the first 5,000 to hold a larger number of cases because of -- they've been in -- in our logs longer, but we do -- we have emphasized completing the first 5,000 cases because they've been in-house the longest. We have a special team working on these first 5,000 on a case-by-case basis. It's also important to mention that the first 5,000 cases is dependent on coworker data, which is something that you already know. It's been mentioned in the previous Advisory Board meetings. And the first 5,000, we're almost halfway through in terms of completing these cases.

Administratively closed, which I mentioned previously -- the reasons why a case would be administratively closed, if we have not received a signed OCAS-1 within the allotted time period with the 60 days that the DR is sent out and then we allow another 14 days -- contact the claimant again, send out another OCAS-1 for them to send, and then we will

administratively close the case if we haven't heard back from them. But it's not as cut and dry as that. We try to make as many efforts as we can to get in touch with the claimants to make sure that they are understanding the process. But this totals 65. If you add those figures together it totals 65 cases that have been administratively closed. This -- this -- there has been an increase from eight to 20 from December '04 to January of 2005, and there -- this is -- this figure is claimant-dependent, so it all depends on what we get back from the claimants, their OCAS-1 signed. And also it's relative to the number of draft dose reconstruction reports that we -- we send out, which the number is increasing. Reworks which we get back from the Department of Labor to make changes whenever a claimant provides new employment information or changes in cancer information, they come back to us for us to reprocess the dose reconstruction, which -- we've received 525 and returned 307, meaning if you track the two figures, 525 minus 307, that's 218 that we have in-house as of January 31st.

Phone calls and e-mails, number of phone calls OCAS has received, 36,323, and these are from claimants, authorized reps. ORAU has larger figures because they handle the CATIs, the closeout interviews and any SEC phone calls that have been recently processed, and it's 139,347.

And e-mails, 5,784, but important to mention here that a claimant could contact us by e-mail and they may not provide all the information for us to provide status for them, but we'd definitely get in touch with them.

SEC petition status as of January 31st, 2005, we've received a total of 17 SEC petitions, 11 of which are active. Five of the 11 are qualified for evaluation, representing two sites, Mallinckrodt and Iowa Ordnance Plant. And six are -- six are closed. This information is published on our public web site, and it does illustrate the six closed petitions and the sites.

And of active petitions, they represent the following sites you'll see listed down in the last five bullets which -- which sites it represents and the number of petitions. For

the Iowa Ordnance Plants the five have been merged into -- or four have been merged into one and one has been received in January.

Our accomplishments. In January we sent out over 17,000 activity reports to our claimants and authorized representatives, and we've -- we have met the goal of exceeding final dose reconstructions at 6,000, and we have -- we'll be submitting three SEC evaluation reports to the Board representing Iowa and Mallinckrodt.

We've hired a statistician part-time, and in terms of the progress of site profile documents, we've approved since December 2004 eight Technical Basis Documents and four Technical Information Bulletins.

This concludes the -- my program status report, and I'll be open for questions.

DR. ZIEMER: Thank you, Heidi. Let's open the floor for questions. Who wants to go first? I can't actually see everybody, but I'm looking across there 'cause I know that Jim usually has his tent turned up there quickly and -- go ahead, Jim.

DR. MELIUS: That was a signaling system.

DR. ZIEMER: Yes.

DR. MELIUS: The numbers aren't great, but I noticed in your report on the DOE response to requests for exposure records that there appears to be some increase in those, particularly those over 90 days or more, compared to the last meeting.

MS. DEEP: For over 90 days, 27?

DR. MELIUS: It was 27 last -- well, if you total all the ones from this meeting, it's over 100 over 90 days or more and at the last meeting we were about 60 or 70. I'm just trying to understand what -- that's just normal correspondence delays over the holidays or is that a -- a problem occurring with one or two sites?

MS. DEEP: Well, Hanford and X-10 kind of represents a hold-up for a lot of these -- the requests that are outstanding. But in terms of how long they -- why they've been delayed, we -- like I said, we -- we keep a dialogue between DOE. Stu?

MR. HINNEFELD: I just wanted to offer that we're not -- we don't have any particular systematic problem with anybody. I think it's just normal fluctuation.

DR. MELIUS: Yeah, thanks. My other question is -- again, I've asked it before, and that is the cases completed by NIOSH tracking number, and you've made some progress in the first 5,000. Looks like you've taken off about 400 to 500, something like that. By the way, thank you for giving us these graphs in bigger fonts. I can read the current ones. I can't -- sure I can quite make out the last ones, so looks like you've made some progress there, but it also looks like that progress is pretty much across the board. So if you look at the cases, the -- the 15,000 and the 16,000 cases, there's also been a lot of progress there, so --

MS. DEEP: Yes.

DR. MELIUS: -- again, could you fill me in a little bit more on the first 5,000 and what's happening with them? You mentioned today something about coworker issues. Last time we heard about construction worker issues. I'm just -- I mean it's --

MS. DEEP: Well, the first 5,000 we're -- we're -- we have a special team put together to emphasize working on the first 5,000, but we definitely are working on the overall -- all

the cases, but we're looking at cases, the first 5,000, to reduce the backlog and also because they've been in-house the longest. Something that was mentioned at the Advisory Board meeting in December is that coworker data is holding up a lot of the processing of the dose reconstruction reports for the claimants within the first 5,000 range --

DR. MELIUS: Could you --

MS. DEEP: -- and because of coworker data that we're waiting on.

DR. MELIUS: Could someone elaborate on why we're waiting for coworker data?

DR. NETON: Yeah, this is Jim Neton. The first 5,000 cases have gone -- have been gone through and we've accom-- we've completed the ones that were the ones that fit the efficiency process as being overestimates or underestimates or whatever. It turns out that a number of those that are in the first 5,000 are going to depend upon the completion of the coworker data evaluation. That is, we have no monitoring information for those workers and we need to substitute some surrogate exposure values. And ORAU is working towards that end, it has just

not progressed along as quickly as we had hoped.

DR. MELIUS: When you say work -- ORAU is working on that, how are they working -- how is that being produced? How do we -- what evidence of that do we -- I'm -- I'm not looking -- I mean is there a special report, is it a modification to the site profiles?

DR. NETON: Actually they'll appear primarily as these Technical Information Bulletins --

DR. MELIUS: Okay.

DR. NETON: -- that'll go out and they'll describe a -- a fairly well prescriptive approach as to how you deal with it for each site. Now whether those will get rolled up into site profiles eventually remains to be seen, but they will originally appear as special reports. They will appear on our web site.

DR. ZIEMER: Judson, were you --

DR. MELIUS: (Off microphone) (unintelligible) or somebody else?

DR. ZIEMER: Judson Kenoyer.

MR. KENOYER: Let me -- let me add to that. I'm Judson Kenoyer from the ORAU team. Two of

the four Technical Information Bulletins that Heidi referred to are directly affiliated with the coworker data. They set the -- they set the baseline on how we're going to do it for external dosimetry and internal dosimetry. It establishes the process. So within the next two or three months, you will -- you will see the results of -- of some of that coworker data study. We're looking at -- we're working on Y-12 data, X-10, K-25, Paducah and Hanford right now, so you'll see some results fairly soon.

DR. MELIUS: And is that the same effort as involving construction workers that Jim Neton's talked about --

MR. KENOYER: No, that's -- that's actually a separate coworker study looking at the -- first of all, the data from Savannah River, and I'm helping lead a subtask group on that, so that's -- that's actually a site effort.

DR. MELIUS: Okay.

DR. ZIEMER: Larry Elliott?

MR. ELLIOTT: I'd just like to add to Jim Neton's comments. Another way we're attacking the first 5,000 is we're -- we're giving a very concerted, focused effort to identifying cases

in those -- that first 5,000 where we don't think we can do dose reconstruction, where we haven't found any information to support the dose reconstructions, so we're -- we're looking at that, as well.

DR. MELIUS: And when is that -- I believe last time you referred to that work going on and some sort of report being due soon or something -- maybe I'm -- my recollection isn't that --

MR. ELLIOTT: Yes, in Livermore we mentioned this and we talked about ORAU providing us a report on the first -- their first screening of that 5,000. We have that report and we're working with ORAU to refine it, and in the course of the next six months they're to provide an additional report beyond that, so -- but we have the draft. We're working with them to refine the first report now.

DR. ZIEMER: Thank you.

DR. MELIUS: Could I request that -- I think it'd be appropriate that we would -- the Board could get a presentation on actually all three of those, at the appropriate time. One would be this effort involving the coworker data. It's clearly something we're going to be

dealing with in the next couple of days with the SEC evaluation, so I think it would be useful to have a briefing there.

Secondly, on the effort with construction workers -- again, I'm not quite sure on the timing on that, if that's as soon.

And third, on the approach being used and the results of this effort to screen for those where dose reconstructions can't be done.

DR. ZIEMER: You've heard the request, and Board members, is there general agreement that you'd like that information?

It appears to be. Thank you.

MR. ELLIOTT: We'll certainly bring forward a report to you on the coworkers data issue and how we're approaching that. We'll bring a report to you on the attempt and efforts we have underway to identify cases where we can't do dose reconstruction that would constitute an SEC. We're not at the point ready to bring you anything on construction workers. The request for a proposal, which is the way the government goes about soliciting a contract to do this work, I think is going to be signed this week or next week, and that will put folks on task

to get this job done, so --

DR. ZIEMER: Could there be, however, a report simply describing what the process will be, or what -- I'm trying to understand --

MR. ELLIOTT: Well, the process for construction workers is the same as the site profile development process. They're talking to workers. They're -- they're drafting a -- a chapter, if you will, or a Technical Basis Bulletin that speaks to construction trades experience on the particular site or sites in question. Our first two sites are Savannah River and Hanford, and certainly when we develop that a little more we can bring that before the -- before the Board.

DR. ZIEMER: Thank you.

DR. MELIUS: Okay. Is --

DR. ZIEMER: Follow-up?

DR. MELIUS: One final thing along with that, it would be at least helpful to me, maybe to other members of the Board, when you're -- when we're doing some of these -- next round of presentations on some of these issues is to have some sort of estimate on -- of the -- those that are left from the first 5,000 or

some number, how they fit into different categories -- a third of them are X.

MR. ELLIOTT: Okay.

DR. MELIUS: To the extent that you can do that, that's -- do that. I'm not looking for something, you know, 346 or something, but you know, a percentage so we have some idea of what --

DR. ZIEMER: What the distribution is on those?

DR. MELIUS: Distribution is, yeah.

DR. ZIEMER: That seems reasonable. Thank you. Other questions for Heidi or for the staff? Anyone have a question before Jim goes to round two here? Okay, Jim, I guess you've got the floor again.

DR. MELIUS: Yeah, I guess -- this is actually a question from last time, also. Can you update me on the status of ORAU's -- I don't know if it's a renewal, new contract, whatever, where that is and the amounts of money involved?

MS. DEEP: I don't have that information.

DR. MELIUS: Somebody have the information?

DR. ZIEMER: The question is the status of the ORAU contract.

DR. MELIUS: I believe at the last meeting we were told it was being --
MS. DEEP: A cost performance?
DR. MELIUS: -- and was being renewed and additional monies were being put into it and --
MR. ELLIOTT: The contract is --
DR. MELIUS: -- being negotiated at that time, so you weren't --
MR. ELLIOTT: The contract is a five-year awarded contract. The -- what we talked about last time was, at the point we're at right now where we're involved with ORAU in negotiating the next -- it's -- every six months there is a cost performance award fee. It's an incentivized, negotiated award fee. In other words, we place criteria about their performance in front of them and in order to achieve any award money they have to meet certain levels of that criteria. That's the incentive aspect of it. So that -- that is -- that's under constant -- almost constant negotiation for the future six months.
We have -- we're about mid-year or mid-way through the five-year contract. We are -- we put money into the contract just -- in January,

and I'm not -- I don't have the figures with me. I don't know if Stu has them or -- Stu doesn't have them, either. We'll have to bring those to you at the next meeting or we'll get it before, but I don't have those final figures at this time.

We -- the next -- this -- this modification on funding for the contract will take us through the next 18 months, and that will leave the final 18 months of the contract then will have what is called another contract mod where we look at the work remaining and we negotiate with ORAU on what the cost will be to complete that work and complete the final year of the contract.

DR. MELIUS: I would appreciate if you could provide that to us prior to the next meeting.

DR. ZIEMER: Okay. Other comments or questions? Yes, Roy DeHart.

DR. DEHART: With regard to the administrative closed records, do those represent the cases in which an award has been made or a determination of no reward has been made?

MS. DEEP: The reasons why we consider a case to be administratively closed is if we haven't

received -- can you hear me? -- if we haven't received an OCAS-1, a signed OCAS-1 back from the claimants and they have -- how that works, they receive an OCAS-1 form in the mail whenever we send out the draft dose reconstruction reports. They read through the draft dose reconstruction, they get the OCAS-1, they sign it, they have 60 days from the time that is mailed out to the time -- from that time point for them to get it back to us. If we haven't received the OCAS-1 within the 60 days, we send out another OCAS-1 with a letter explaining to them they have an additional 14 days to send it back. Of the 65 administratively closed reports that we have in-house, only one of them has been -- tended to be compensable where we've actually reached out to the claimant, who didn't understand the process, which was a survivor, and -- but of the 65, they tend to be non-compensable and they're single claimants -- cases.

DR. DEHART: Do you have any estimate of how many have been sent out total, even though you haven't received responses from those?

MS. DEEP: How many have been sent out to the

claimants?

DR. DEHART: Of the OCAS form for signature.

MS. DEEP: The OCAS-1 -- those -- that's included -- well, that -- you can assume that in the draft dose reconstruction reports that are sent to the claimants on a monthly basis. That's in --

DR. DEHART: Yes, okay.

MS. DEEP: -- on the previous slides, up towards the beginning.

DR. ZIEMER: So this would be 60-whatever out of 6,000 or something?

MS. DEEP: For January there was 504 that were sent out, draft dose reconstruction reports sent to claimants, so with an OCAS-1.

DR. DEHART: That was what I was --

MS. DEEP: So we're averaging about 500 a month.

DR. DEHART: Okay.

DR. ZIEMER: Okay. Other questions?

MR. ELLIOTT: Let me help Heidi out here for Dr. DeHart. Each time a draft dose reconstruction is sent to a claimant, an OCAS-1 goes along. We have sent over 7,000 of those. If you count the ones we've sent to DOL and the

ones right now that we have in hands of claimants, that number's larger than 7,000. This 60 represents the population we have not heard back from. Does that help? Does that answer your question?

DR. DEHART: Yes, and I would suggest that that be titled that way.

DR. ZIEMER: Richard, did you have a comment?

MR. ESPINOSA: Yeah, under the response to request, I'd like to see a breakdown by site. And the reason for that is I just want to see if there's any problem sites out there on the 90 days and above.

MS. DEEP: Certainly. Responses? Is there any particular -- 60 days or more -- are you talking about outstanding requests?

MR. ESPINOSA: Yes.

DR. ZIEMER: Rich is really asking are there particular sites that are represented there.

MS. DEEP: Actually there's two sites that stand out. For over 60 days or more, Hanford has 22, with Oak Ridge, the X-10 facility, having 18. These two facilities tend to hold the largest figures of all the other facilities within 60 day, 90 days, 120 days, 150 days or

more, for each one of those categories.

DR. ZIEMER: All the way through.

MS. DEEP: Yes.

DR. ZIEMER: Yes.

MS. DEEP: Aside from -- yeah, Hanford and X-10 tend to be -- hold a large number, except Oak Ridge, X-10, doesn't have any requests over 150 days. They tend to be more in the 60 days and 90-day category. They have 18 and ten, respectively.

DR. ZIEMER: Thank you. Others? Okay, thank you very much, Heidi.

MS. DEEP: Thank you very much.

DOL PROGRAM STATUS REPORT

DR. ZIEMER: Shelby Hallmark is with us again today. Shelby, welcome back. He's going to report on the Department of Labor program status.

MR. HALLMARK: Okay, am I on? Oh, good. It's my pleasure to be back to speak with the Board and with the audience here today. I'll try to move quickly through the slides -- if I can figure out how to do the machine -- 'cause I think you've seen these slides several times before and I'll try to hit the high spots,

maybe have some time for questions.
Okay. All of these slides for the first 12 or so are Part B slides, and then at the end I'll have a couple of shots with respect to the new Part E program, just to talk a little bit about how we're getting that started.
With regard to the claims received and the breakout by types of conditions here, these data are -- should be familiar with you from previous presentations. I would -- I would note that the percent of claims involving cancer is growing, as we would expect that would be the case, and that the other non-covered conditions we believe is a declining group. When we have fully established our Part E program and have our regulations in place, we expect that group to go away because that is really sort of an artifice (sic) of the separation between the old Part D program and the new -- and that -- and the current B. People who filed what were really Part D claims with us got into this category of non-covered conditions and got a denial from us. In the new world we'll treat all claims as Energy claims, EEOICPA claims. We'll find which side

the person belongs on and this group will disappear. And it will save us a lot of unnecessary paperwork and denials flowing around the system that really don't make a whole lot of sense. So hopefully that's one positive impact of the consolidation of the Part E program with -- with Part B.

Case status -- here now again, as I've explained many times before, case versus claim, case relates to an individual worker; claim can be multiple if there are multiple survivors. That's why the numbers here are lower, 44,000 versus 60-plus. The point made by this slide is basically that we are -- DOL's process remains current. We have a working backlog of cases being handled at the district offices for recommended decisions and at our final adjudicatory branch making our final decisions -- 95 percent, in fact, of all receipts have been resolved at the district office level, either by a recommended decision or referral to NIOSH, and 89 percent have gotten a final decision or referral to NIOSH.

Have I gotten to the next slide here? Yes, there we are. Okay, this tells you a little

bit about the outcomes. As has been reported before, we're approving roughly 40 percent of the claims at final decision. But if you take out those -- those non-covered conditions which are the old Part D claims by accident in our -- in our program, then the approval rate rises to 56 percent. That's -- that's been a continual circumstance in the program.

With respect to cases -- to the responses that claimants have made to our recommended decisions in the district offices, this is the total outcomes since the inception of the program through January 13th, what's interesting to note here is that roughly ten percent of the cases involve some sort of request for further review or a hearing. That's, we think, an indication that the program is being administered fairly well in our district offices.

NIOSH referrals, obviously the NIOSH cohort is what the Board is particularly concerned with and so we'll get into a little more detail here. And I'm sure you'll note that our numbers and NIOSH's are never going to be precisely the same and, you know, if that --

that -- that's a resolution I don't think will ever come in my lifetime. I think what I would note about this is that -- one of the things I would like to note is that when a NIOSH dose reconstruction is completed and returned to DOL, our goal is to do a recommended decision on that case within 21 days, and that goal has been -- was met during fiscal year 2004. In the first quarter of 2005, which ended just a few weeks ago, we dropped off -- we fell -- 25 days, it rose to 25 days. I would ascribe that in part to the increased production that you just heard from Heidi with respect to NIOSH cases coming to us so it was a little more work for us to do. And also in part to our having diverted some of our staff to get Part E up and running as quickly as we could. So there has been some drop-off there. We don't intend for that to stay the case. We're going to get back down under 21 days for the rest of fiscal 2005. Correct, Pete? Am I right on that? Good, I'm glad to hear that.

And it's also note-- worth noting from this slide that about 24 percent of the final decisions on dose reconstructed cases have been

approved to date. The approval rate at the recommended decision level is about 20 percent. NIOSH case remands, now in our -- my presentation last time in Livermore we talked a little bit about what we can tell the Board in terms of the outcomes of cases that have been reconstructed through the NIOSH process and where we're having to send them back when we -- from a hearing or a review of the record. And that's -- this number here is the number that we have gleaned -- that we're able to get our hands on. I think there were actually 20 or 30 more remands to NIOSH that were -- that the case file could not be located at the moment that we did this survey, but I think this is close. About 300 have been remanded from our final adjudication board.

And we'll talk a little bit about how that's broken out, and I know it -- as I say, it's of interest to you. One thing you'll hear me say is that I can't break it out the way we would like and I think you would like, which is which are errors by NIOSH and which are new evidence presented in our process. Very, very difficult to do and we'll continue to try to peel that

onion, but I'll give you what I can.
You see here where these remands came from, about half from claimants objecting to our recommended decision and to the NIOSH data that supports the recommended decision, and about -- the other -- the 140 in the non-contested cases, that's where our final adjudication board is looking at the decision -- recommended decision from the district office on their own motion, in effect. And if they find a problem, would go ahead and proceed with it, even though the claimant has not raised it.
All right, now why were these remands done out of these 300 remand. We've broken it into three categories here, which are -- I think primarily are drawn from the fact -- the way our adjudication process works and our regulatory structure works. A little bit difficult for me to explain -- or for me to understand, frankly -- the difference between application and methodology. Basically, methodology is a -- would be a remand where the individual is -- is asserting that the NIOSH methodology is not appropriate. And the reason why it's separated out from application of the

methodology, which is what that application shorthand means here, is that the application might be something where we would argue that we need to send it back and we would actually, at DOL, possibly look behind the dose reconstruction report that we received from NIOSH.

With respect to methodology, if a claimant is arguing I don't think that the use of a comparat-- or coworker group is appropriate, we're not going to question NIOSH's use of that methodology because that's been established in their regulations. However, if the claimant is asserting you used the wrong coworker cohort, that would be an application issue and we would eventually make a decision about that, one way or the other. But in this case, these are all cases that would have been referred back to NIOSH for comment about those kinds of issues. And factual of course is the biggest one, and we'll talk a little bit more about what that category means. These are the -- this is a breakout of the types of factual issues. As you can see, the biggest one is that one -- that more cancer, a different cancer has

arisen, an additional cancer has arisen, possibly between the time that the dose reconstruction report was completed and our final decision. Employment issue's another large one. The claimant may assert that there was an employment period not covered in the dose reconstruction, or not adequately explained by the report itself.

Type of cancer issues, one reason or another we believe the wrong cancer has been applied in the report; district office IREP issue, that probab-- DO, that's what DO means, district office -- that could very well be an error on the part of our staff in applying the IREP, and I think it also could include some NIOSH issues. And frankly, I think that would be just one or two cases. Date of diagnosis, just possibly the onset date is -- is changed. And in three percent of the cases we got an OCAS-1 that was not signed. This is the category that Heidi was discussing just now in terms of the administratively closed. We can't act on a case that hasn't been signed so it would be go -- it would go back to NIOSH.

It's important to note that of these remands,

the overwhelming majority do not -- have not -- at least of the ones that have been re-decided, have not changed the outcome. Only four have resulted in an acceptance out of the roughly 140 or so that have been re-decided. Most -- the 167's the largest number, is still pending re-decision, but for the most part the -- the -- I would describe this to a punctiliousness on the part of our -- our final adjudication folks to make sure that every T and I are -- are crossed and dotted, respectively. And many times that will result in NIOSH coming back, explaining in further detail what the basis for their report was, and the outcome remains the same. In any case, we will continue to do that and obviously that's important to the process that we -- that we -- we do in fact flush out all these issues.

Now I've gotten behind on my cheat sheets here. Excuse me a moment while I shuffle papers. Somebody turn the lights up 'cause I can't even read my big writing here.

Okay. This gives you just the basic data with respect to our payments at this point and that -- obviously we're over the $1 billion mark

with respect to compensation and medical benefits. And the NIOSH claims, we've actually made 1,400 or so claim-- payments on cases that have been through the NIOSH process, which -- again, I would say suggests that while it has been slower than all of us would like to evolve, the NIOSH dose reconstruction process is in fact now working and has delivered benefit outcomes to quite a number of people. Obviously we still -- we all want to see it accelerate.

I'll turn now to Part E very quickly. As you know I think, the Congress amended the EEOICPA in October to abolish the old Part D program that had been administered by Department of Energy and created new -- okay, so somebody had tried to abolish me here, I think -- abolished Part D and created a new Part E for us to -- which DOL would administer. We are in the process of beginning that administration. Part of what we're doing as an effort to address the key problem we face, which is that there were 25,000 cases in the process waiting for us when it transferred from DOE, was to get up and running as quickly as possible. So we -- the

bullet here with respect to interim procedures refers to the fact that we have -- especially with the good work of our Solicitor's Office -- divined ways that we could start making payments before we even put regulations in place for the program, so we have what we call -- it's actually a preliminary procedure that we're using to make payments. We have done that with respect to a number of cases, which I'll show you in a minute. We've had some check ceremonies to get the word out that this is in fact occurring and we've had our first town hall meeting.

Here are the stats on this program -- 23,000 cases have already been transferred from DOE. And by the way, they're doing a very effective job of coordinating with us on this transfer. About 1,900 cases are still in the Part D physician panel process. The statute that abolished Part D said that it could continue on until the -- for the cases that were still in the panel process, and that's what's left of them now. And they will continue to spin out decisions which we can use under Part E.

We've made 159 recommended decisions and 97

final decisions, or we had as of last week sometime. We're only doing approvals under these preliminary procedures because we don't yet have in place the regs that would adjudicate disputes. But as you can see, we already have a respectable start and we expect hundreds more cases to be processed under this approach before we get our regs out, which -- about which I'll say a few things.

The regulations are currently in process right now. These will be interim final rules. They will be published -- we are certainly hopeful, as this would -- by the statutory target of late May, or earlier, if we can accomplish that.

We have a task force that Pete Turcic and his team in the Energy Division have pulled together -- primarily again pulled from within our Part B ranks -- who are working to establish all the pieces that are necessary to create a brand new program like this, and I think they're doing an excellent job.

There will be a series of town hall meetings, and I'll talk about that in a moment.

Part B claimants. There's one -- one

significant revision to Part D in the October 2004 amendments, has to do with the issue of residual contamination at AWE -- Atomic Weapons Employer sites and expanding the employment eligibility window with respect to those sites. We are working on that in conjunction with our development of the Part E regulations and procedures, and what this bullet suggests is that there are a small cohort of folks, roughly 200 -- little over 200 -- who were denied under Part B -- the existing statute -- pre-existing statute -- because their employment began after the DOE contract period, but during a period that NIOSH has found that there was residual -- significant residual contamination at that site. Those individuals are going to be receiving notification from us within the next few weeks that they are in that cohort and that if they wish we will reopen the claim at their request, to be considered under the newly-revised eligibility criteria. So that's moving ahead, as well, and we expect that to work out for us.

Last slide here, and I'll then open the door for questions, is just a quick look at the --

at our plans for town hall meetings around the country to -- primarily to explain how Part E is going to work, what people who are in that program should expect from us. The first -- this is on the left side of the screen here are -- and the top of the right are sites we're going to be getting to in the next -- I'd say month and a half or two, at the most. The other locations to be announced would be -- are probably going to be the next phase after our final -- interim -- final regulations are issued so that we can explain in greater detail, and that -- some of those other locations will be returning to the larger sites so that we can explain how the full program will be implemented when it is in fact public. So that's -- that's basically where we are with respect to Part E and Part B, and I'll be glad to take questions.

DR. ZIEMER: Thank you, Shelby. First Robert Presley -- oh, okay, Rich, you're first? Then we'll just go right around, Robert --

MR. ESPINOSA: Well, I just --

DR. ZIEMER: -- Roy, Jim.

MR. ESPINOSA: Just wondering how you're going

to notify the sites of the -- of the town hall meeting.

MR. HALLMARK: How will we notify them?

MR. ESPINOSA: Yeah.

MR. HALLMARK: We --

MR. ESPINOSA: Are you going to publish it in the paper or...

MR. HALLMARK: Right, we will -- our process on that will include a news release -- (unintelligible) who would be contacting Congressional delegations and local folks who are important to the program in each site, and typically we'll do that a couple of weeks before the event so that we have enough notice and information flowing out to the public at the site so that we can ensure that people are aware of it and that they are well attended.

MR. PRESLEY: Shelby, could I ask you when -- when you have these public meetings, please let the Board members know. It was -- you had your first one in Oak Ridge, and I read about it in the newspaper and got asked about it, so it sure kind of made it look bad on me that I wasn't even there.

MR. HALLMARK: I'll take that under advisement.

We definitely want to do that. I think the first site -- we were anxious to get that -- that meeting done quickly and we weren't as well-organized as -- as we might have been. So we certainly want to make sure that you're aware of these items, we get it -- the information to you so that you can participate if you'd like when we come to your neighborhood.

DR. ZIEMER: Thank you. Roy?

DR. DEHART: Workers who have developed cancer and are qualified under Part B I understand are also now qualified under Part E, thus it would appear to be only an administrative process to take care of their Part E claim. Are they being notified of that process of how to go ahead and file under Part E?

MR. HALLMARK: That'll be -- those kinds of issues will be part of what we talk about at the town hall meeting, but with respect to a large number of them, they've already filed their claims under the old Part D, and those claims will be automatically deemed to be claims under Part E, so they don't need to do anything, individuals in that category. And

then we'll be in touch -- I think -- we've already sent out a letter to all our -- all of the old Part D claimants, the 25,000 that I showed in the slide earlier, indicating that we've taken over the program, that their claim will now be transferred automatically, requiring no further action on their part. And since roughly -- I'd say about 90 percent of the 25,000 who are in the DOE backlog are also Part D claimants, so a big number that you're thinking about are in the queue.

There's another subset of people who've filed under Part B and for one reason or another never filed under Part E. They will need to come forward to us and -- if -- if they want to proceed with the additional eligibility, and we'll be discussing how that can be done, as well.

Right now we're -- we continue to receive claims and will take them at our resource centers in the major sites, using the old forms that DOE was using, until we get new forms in place through regulations -- but we intend to do that.

Now let me just quickly say, it's not an

entirely administrative process. Because while approval under Part B is deemed to be automatic approval under Part E with respect to causation of the illness, you then need -- the individual, if it's a living worker, that individual would need to show their eligibility against the criteria for compensation under E. And for a living worker, that would be some kind of an impairment rating that translates into a -- an amount of -- a percentage which links to $2,500 per percent payment and/or wage loss compensation based on years when their total salaries were less than a -- the thresholds, so that has to be done.

And with regard to survivors, many of the Part B recipients are survivors. First -- and this is very important for everybody to understand -- they must be survivors within the definition of Part E, which is the traditional Workers Comp survivor, the narrower definition, which includes spouses and dependent children at the time of death.

The second test is the survivor must show that the death of the worker was caused or contributed to by the condition which was

approved under Part B. We expect that in the large majority of cases that will -- that will be relatively straightforward, and the number -- the number of cases that we're handling now are all survivor cases, the ones we're paying under our pre-reg approach are survivor cases where there's a death certificate that links up very closely, either to a Part B condition that's already been approved or to a condition that Department of Energy's physician panels had already approved in terms of its causation. All we need to do is that separate step of showing -- showing that the death was related, and that's -- that's how we're able to proceed on those.

DR. MELIUS: You answer-- actually answered most of my questions, but one left is, as a sort of a corollary to that, though, people that are not -- the people who don't meet the probability of causation test for Part B could still be eligible under Part E, also. And will that be taken care of in your regs and so forth?

MR. HALLMARK: People who do not meet the Part B --

DR. MELIUS: They'll be eligible under Part B, but they will be -- they did not have sufficient probability of causation to have their claim accepted.

MR. HALLMARK: That's something we'll have to address in our regulations, also.

DR. ZIEMER: Let's see, I think Rich, you were next and then Leon.

MR. ESPINOSA: On slide nine you have a little mention there of employment issues. What -- what type of issues is that? I mean -- it's 30 percent. It's a high number.

MR. HALLMARK: On the reason for the remand?

MR. ESPINOSA: Yeah.

MR. HALLMARK: The employment issues -- that would include, for example, a claimant who comes to our -- to a hearing or presents to the -- to our adjudicatory group evidence that there was a period of employment which was not directly addressed in the dose reconstruction report. Now that could be that information about that period of employment was newly-discovered in the interim -- and this goes back to my point about trying to separate out errors in the NIOSH process from new evidence. The

employment period could be something new that was -- that's educed because a survivor found some information from a neighbor or relative that wasn't available when NIOSH did their interviews. Or it could be something that NIOSH missed. It was there in the file and it just didn't get addressed. Or it could be something that's actually addressed in the dose reconstruction report, but not clearly. We wouldn't have remanded it if the -- if our adjudicatory person could go -- could go back and look at the dose reconstruction report and say no, Claimant, you've raised a question about the period 1962 through '65 as a pipe fitter and here's where -- here's where the report shows that that employment was addressed. But it's possible that when our claims staff looks at it, they can't find that reference. We send it back to NIOSH. NIOSH comes back to us and says yes, that was incorporated but we didn't -- we weren't clear enough. Here's another paragraph that explains how that period of employment was in fact addressed in the estimation process. So that -- those -- it's a whole range of possible

issues. And again, we would -- we're not giving up on getting closer to the evaluation of how many of these are -- are just errors from the NIOSH perspective versus things that fall out of the adjudicatory process. We're going to continue to work on that.

It's interesting to note that in our -- of 60-some-odd hundred dose reconstructions that have come back to us, we only have a little over 300 which have been remanded to NIOSH, period, from the adjudication process. And that's about what, less than five, six, seven percent? It's a small number. It's -- and then obviously many of those are not errors, they are new evidence. So that -- I don't know what that seems to suggest. That would seem to suggest there is a relatively quality process going on, but it's obviously something that requires us to continue to look at it and look deeper.

MR. ESPINOSA: Thank you.

DR. ZIEMER: Leon?

MR. OWENS: Shelby, under the final decisions claims slide, my question's in regard to the non-covered employees. Is that a function of DOE not being able to verify employment, or is

it another reason?

MR. HALLMARK: Not -- you mean the reason of not a covered employee, the reason for denial?

MR. OWENS: Right, for the employees that are not covered.

MR. HALLMARK: No, they would -- they would -- typically the reason they're -- that category would be individuals where, in one fashion or another, we have chased down and -- and reached a finding with respect to their employment, but we have determined that it was -- that they were not an employee of the site. For example, they worked for a construction firm but we don't place the construction firm at the site. And those -- there aren't -- there weren't many in that category who fall out altogether. The other -- the other employment issue would be individuals who came to work at the site or for a contractor or subcontractor, but after the period of time that was the DOE contract at an AWE. Again, some of those are the ones that I was speaking of who will be newly affected by the residual radiation amendment that opens the window for them in some sites. That's a small number, also.

MR. OWENS: Yes, sir. That was my question, particularly in regard to -- to the Paducah site. What we have found were there are a lot of the older workers who did work for various subcontractors building specific buildings, and some of those individuals have received letters -- have received letters stating that DOE has been unable to verify their employment. So right now we're in the process of -- those that are still surviving, of getting affidavits to support that position. So I do -- I do feel that there might be some subcontractors that performed work, not necessarily in the entire facility, but on specific projects that might have missed -- been missed.

MR. HALLMARK: Well, that -- we have a exhaustive procedure to go as deep as we can on those kinds of cases. Just the fact that an individual receives a report from DOE saying we can't place the person doesn't stop us. We go to affidavits, we go to corporate sponsors, corporate entities in some cases, and we go to Social Security Administration and obtain wage records that we then try to put together with affidavits to -- to make a nexus with respect

to the particular work.
Now it's not to say that there aren't -- there aren't going to be cases where all of that fails and we can't -- you know, and there's just not proof the individual actually worked there. But certainly we push all the envelopes that we can to come to closure on that issue.
DR. ZIEMER: Mark?
MR. GRIFFON: Yeah, looking on that same slide actually, final decisions, there's a category, insufficient medical evidence --
MR. HALLMARK: Uh-huh.
MR. GRIFFON: -- 3,270 denied. Does that -- I wonder if there's any breakdown within that topic. Is it -- is it the case where a person couldn't provide any medical information, or were there access issues that they couldn't get very old medical records, or --
MR. HALLMARK: I would imagine -- typically that's a question where the individual's asserting that they have beryllium disease, usually with a pre-'93 diagnosis, and we find that the condition was not -- cannot be identified as beryllium disease. They assert cancer and we find it's a pre-- you know,

precancerous leukemia -- the sort of borderline issues where the individuals --

MR. GRIFFON: So most -- most of those, though, the evidence doesn't support the condition that was --

MR. HALLMARK: Correct.

MR. GRIFFON: Okay.

MR. HALLMARK: In other words, that's as opposed to the non-covered condition group where we would deny because the individual presents with asbestosis and that's just not -- that's just not covered. These are people who are making a claim of one of the covered Part B conditions, but we've found they -- that they can't -- they can't prove the claim in that -- on the medical basis.

MR. GRIFFON: And then the -- the last bullet on that slide talks about POC less than 50 and cancers not related. What are cancers not related, as defined here?

MR. HALLMARK: Help me out with this, Pete, cancers not related. I --

DR. ZIEMER: Pete Turcic.

MR. TURCIC: That's the CLL.

MR. HALLMARK: Okay, you have the one --

there's one cancer that's -- that's identified in our structure as not being radiogenic, and so in -- technically speaking, it doesn't come under the POC process because of that treatment in the NIOSH reg.

DR. ZIEMER: Okay. You have a follow-up, Mark, or --

MR. GRIFFON: No, I thought that was the case. I just wanted a clarification on that.

DR. ZIEMER: Other --

MR. GRIFFON: Thank you.

DR. ZIEMER: -- questions or comments for Shelby?

MR. HALLMARK: We will attempt our best to make sure that the Board is -- is apprised as these town hall meetings are done, and I -- I'm not sure what the best way of our doing that is, but we'll work with -- with Lew and others --

DR. ZIEMER: Work with Lew and make sure that, as a minimum, perhaps an e-mail notice that there'll be something in a particular Board member's locality that gives them the opportunity to at least be there and observe and participate.

MR. HALLMARK: Right.

DR. ZIEMER: Thank you very much.

MR. HALLMARK: I do -- I do apologize that we dropped the ball in Oak Ridge and we certainly don't want to do that again.

DR. WADE: Thank you, Shelby.

DR. ZIEMER: Thank you.

GENERAL PUBLIC COMMENT

We're a little bit ahead of schedule, and the Chair's been asked to consider allowing some of the public commenters who might not be able to be here later in the day to avail themselves of this opportunity to address the assembly, and I'm going to allow that. We do need to keep on schedule because we have a sort of a time-certain session at 3:00 o'clock. We will take a break at 2:45, but we have some time now that we can allow some of the members of the public who will not be able to be here later to address the group.

I have the list of those who have signed up, but I don't know which ones are the ones who are not able to be there -- be here later, so I simply ask them to self-identify and we'd be pleased to have those speak at this time. They can use the mike here in the center and if any

of those are present, if you'll simply approach the mike and identify yourself, and then the Board and the assembly can hear from you.

UNIDENTIFIED: (Off microphone) Most of those people have already left --

DR. ZIEMER: I'm sorry?

UNIDENTIFIED: (Off microphone) Okay, they came back.

DR. ZIEMER: Yes, identify yourself, please, for the record.

UNIDENTIFIED: Good afternoon, gentlemen. I thank the privilege to get up here and say a few words. We're just about ready to leave. I worked at the Weldon Spring plant. I was the second person hired out there. I worked in every building but three. It's a process that went all the way through the plant and I was a chemical operator. I have cancer, several different kinds of cancer. Some of the people that I work with, especially the ones that came from downtown plant, from the foremans (sic), they all passed away. I hate to say this, but a gentleman named Jim Mitulski, he was a foreman, Leo Pyres, several more. All these people worked on the Manhattan Project. They

came out to Weldon Springs and very knowledgeable what uranium did and what we did out there, but I hate to say this, but actually, gentlemen, we were used as guinea pigs.

The only protection we had was a respirator, a film badge. That's the only protection we had. We urinated in a bottle every 21 days. If you got hot on one job, they put you on another job. I've got all the old -- all the records of mine from Oak Ridge, Tennessee. I went over them with my fellow workers, the ones that's still living, and I can see why some of them did pass away. Their radiation level was very high.

I live six miles away from the plant. What gets me, gentlemen, it took $900,000 to clean up that plant. That's -- it cost more to clean it up than it was built. Believe me, I've got all the information from the newspaper and from Oak Ridge, and when they made all their proceedings and everything, it just -- heartbreaking, when I go by there every day and see that plant there, and all the people that passed away. People like Charlie

Bradensteiner* was my fellow worker. He passed away a year ago. His wife had to sell her house to pay for her medical bills that Charlie had cancer. She did not receive one penny from the government. People like that really makes me feel really, really bad.

This is why I'm down here today or whenever I can come and help other people who worked at -- for Mallinckrodt. I know the technology might (unintelligible) been there, but they knew what radiation that we had because they were down here on Manhattan Project all those years, all the foremen. They came from down there, came out there. They used to tell us what went on down in -- down there at the plant down there. But gentlemen, I hope that something comes out of this so some of these other people can get some benefits out of it. Thank you.

DR. WADE: Excuse me, sir, would you --

UNIDENTIFIED: Bob, would you like to speak a word?

DR. WADE: Would you give us your name, sir, please?

MR. ROTH: Charles L. Roth.

DR. WADE: Thank you.

MR. ROTH: Here's a gentleman, Bob Fulkerson. He was about the 15th or 16th went to work out there. He can tell you about the process.

DR. ZIEMER: Okay. Bob?

MR. FULKERSON: Bob Fulkerson, F-u-l-k-e-r-s-o-n. I'd just like to say we -- at Mallinckrodt, this is Weldon Springs. We took the raw material, changed it into liquid, then it went to orange, then it went to green and then we made metal out of it and went through the whole process out there. I worked -- I'd like to say something about the furnaces I worked in. We would fire these furnaces -- we'd put magnesium with the green salt and it was like a bomb, and it'd fire -- you'd heat these up to like 1,000 degrees. Well, it was okay as long as everything worked right. But there was a liner in these shells and a lot of times this liner wasn't perfect. And when this went off, it just literally blew up. And a lot of times we had to evacuate the whole buildings for the smoke and the -- and the -- and the dust and then we couldn't go back in sometimes till the fire department would clear it. And this happened once or twice a week. I think we had

seven furnaces, and a lot of smoke and a lot of dust. And like Charlie said, the only protective clothing we had was cotton -- white coveralls and cotton gloves. Had a mask that we put on when we felt like we needed it, which didn't do any -- smoke didn't do anything for it. And so that's I wanted to say something about the furnaces there, and there was a lot of dust and in the break rooms, floors were always dusty. We drank coffee in there. It -- it was -- it was not too good. And I think that's all I have to say. Thank you.

DR. ZIEMER: Thank you, Bob. Another gentleman approaching the mike here.

MR. SEMARADI*: Yes, I'm Andrew Semaradi. I worked at the airport. I don't want to take anything away from these Mallinckrodt people 'cause they've been through it all. I worked 43 years for a fueling company out there. We used to watch Mallinckrodt trucks come in and dump along that third runway. Most people don't know it's there. In 1995 or '96, my job -- I fueled for 30 years, 31 years, and then I was utility man. And any time they had anything that looked like kerosene or fuel or

anything, they'd call me. I had a suction truck used to suck this stuff up. When they started doing that construction on the east terminal, the new east terminal, they had -- they held that up for over a year because of the contamination in the ground, didn't know what to do with it. So anyway, somebody came up with an idea, I think they made a -- they called it a glycol recovery system. The glycol and all the water went into that. They never did use it for glycol recovery because it was so full of contamination, they couldn't. They had -- looked like a Esther Williams swimming pool up there that they put the glycol in, and I've got pictures where they had fire hoses going into this pump house down there that was taking it out of these containment pools and it was flooding down towards the airport. And once they opened up our fuel lines, that water all came down towards the terminal. And any of you people ever flew on an airplane, I'll guarantee you and I could show you today -- they fired me back in 2001, but I could show you today 'cause people still contact me, that this water -- you know, anybody who's a

hydrologist or geologist know that water goes down and oils and things come up. This is still coming out today. A guy called me yesterday and said that water, when it rained, it comes up. And if they set your bag down on that ramp, you're taking this home to your -- I've got a oil can that was eaten up in less than a year. And when we went to one of the Mallinckrodt meetings they had a radiation detector there and it set off the needle. And I've got samples. They tell me -- if anybody knows kerosene, it's as clear as water. The people at the airport say well, no, this is fuel. It's in the ground, came through the ground. It's still as black as my thing here is today and I had NIOSH out, I had OSHA. These people all contacting before they come out and there's so much cancer at that airport if -- the Teamster Union, the Machinist Union, I went to them trying to get a list of all the people -- I've probably got 100 people that I know that are dying of cancer. Now it might not be the cancer that you're talking about, but I'll guarantee you that Mallinckrodt dumped out there. And it might not just be

Mallinckrodt 'cause I know the National Guard and MacDonald Douglas and all them have. But we'd like to be included in some of this, too, because I've got two -- I had six operations on my arm. It ate my arm up. And I've been fortunate enough in my life, my doctors said, to get away from there and I got a -- I'm still living. There's so many people I know that have died, they die every week. And I've got a report here. I've got -- we forced TWA and the airport to run some tests and I've got radiation -- we can't get radiation reports. They won't tell us.

Now there's pesticides, DDT and things that have been banned since in the '70's that is in that ground water, and I've -- and like I say, if I could find one of these people from NIOSH were out there -- and they don't do a thing, DNR doesn't do anything, we're on our own. Nobody will con-- tie any of this together. And I'm fortunate enough I'm in good shape now, but I was ready to die a couple of years ago and -- but we're going to have other people come down here later tonight that their husbands have died and things, and I would like

to have the air-- 'cause we're a contractor. We got into this same thing, and I could show you -- and if we ever get a good -- anybody that's really interested, I've got enough people that will show you exactly where all this stuff is. Just like these people from Mallinckrodt, they could probably walk right out there now and show you exactly where this stuff is at. And it hasn't been cleaned up and it's a -- that airport expansion they're doing now, that big hole they dug down there, is just a way to get rid of the contamination at the airport. And once us people are dead, nobody will ever know what they're sitting on top of there. And that's my soap box I guess. Thank you.

DR. ZIEMER: Okay. Thank you. It's -- Andrew. Yes, thank you, Andrew.

Okay. Yes, sir?

MR. LEACH*: My name is Bob Leach and I put in about 13 years with Mallinckrodt in the uranium division, and I, too, worked at Plant 4 and it was one of the filthiest places I've ever worked in my life. And I also, like the other gentleman said, many a times I was inside those

furnaces to clean out where the molten metal had blown out, the uranium metal, and had to clean it up and get it ready for the next firing. And many times that molten metal would come right onto the floor of the area, and of course many of us were exposed to it. They always told us oh, this won't hurt you. It'll be out of your system within the week, and that's all we could find out about them.

Now I -- I've got -- I've had prostrate (sic) cancer, which was removed. The cancer has returned. The doctor says I'll have it the rest of my life. I also had two skin cancers, but in my -- what I found out, none of this is covered under this 20-some cancers that they supposedly will cover, and I think it's ridiculous because it's many of us ended up with that type of cancer, but I don't know if we'll ever see anything or not.

But I worked anywhere from 40 to 76 hours a week out at Weldon Springs because when they had that plant running seven and eight -- or seven days a week and more, you worked. And I was a supervisor a lot of the time, but I still had to be there all the time. And I put my

claim in in January, I believe it was, of 2002. But I just hope that they change how many of those cancers that they're going to cover because, from a selfish viewpoint, I think I'm entitled to it, too.

But the one thing I wanted to bring out, I called Cincinnati, which -- to find out how my claim is going. I called them on August the 30th, and it had never been assigned to medical at that time, and they said that they just didn't have the information they needed from site profiles. I called back in January, the 14th, and the lady there -- and they're always very nice, don't get me wrong. They're very, very nice, but she said Mr. Leach, I might as well tell you that since you worked at Plant 4 of the Destrehan and Weldon and the Weldon Springs records will not be finished until last part -- latter part of June, and then they got to go back to them and then if they approve it, then they have to go to the medical and -- for approval there. And I commented, I said what am I figuring on, another year? She said at least another year before we can get to your cases and -- but she said that they're doing

all they can, but that's what makes it bad when you worked at two different plants and they have to get the exposure records from both plants.

Well, I commented to the lady, and it's -- if it's going to take this long, I'll probably be laying out in Jefferson Barracks Cemetery before they get this going. Thank you.

DR. ZIEMER: Thank you, Bob, for sharing that with us and -- lady at the mike, yes, please?

UNIDENTIFIED: Do you have time for one more?

DR. ZIEMER: You bet.

MS. SHUMACHER-CORDING: My name is Sharon Shumacher-Cording -- excuse me while I pull this down. Shelby -- I forgot your last name -- I take exception with what you said up there, and I got a little bit of I think we're slightly bashing NIOSH, and maybe that wasn't your intent, but that's what I read. The NIOSH folks have been nothing but super, super great -- to me, anyway. I don't understand a lot of what you said because they're approved over here, they're not approved over here. We do consider medical records. Oh, yeah? Burlington, Iowa -- was that two years ago,

gentlemen? One year ago? Yeah, it was a year ago -- we were blatantly, angeredly (sic) told, in no uncertain terms, by government representatives of both Departments, DOL and DOE, that medical records were not, will not, never will be considered in any of these cases. Now somebody at that meeting taped that meeting and I can get that transcript for you. We had a couple of experts from the DOE and DOL there that just wouldn't have any truck with us at all, whereas the NIOSH guys were nothing but kind. They were factual, they were up-front, across the board. So I kind of feel like I was lied to.

My hus-- first husband worked at the Iowa Army Ammunition Plant in Burlington, Iowa from October of '66 until the move from AEC was made to Pantex. Material checker. Those guys were all over that facility. Yard L was considered the ship-in/ship-out yard for AEC. I didn't know until I appealed a denied decision claim that at the shipping point of going to Pantex all of the checkers handled the balls of uranium bare-handed, no protection at all. During the course of their employment for AEC,

the one gentleman from Mallinckrodt -- urine test, badges -- that was a joke. I will have some more comments for the SEC petition on Wednesday. I personally find it sad that the Iowa Army Ammunition Plant was not even recognized at your inception. From what I've sat here all day and watched and seen and heard, you folks are giving us your very best shot, during the very best you can with what you have to work with. And you are to be admired and applauded for that. Anybody gives you any static, just hit them over the head, because you really are trying. But the folks in Iowa -- and to a lesser degree, Mallinckrodt, because at least Mallinckrodt gets a site review, we don't -- I think. Did I read that right, Mallinckrodt folks, did you get a site review? Okay. Because we weren't known. We were the black hole. We didn't exist. But at some extent all of the 22 accepted cancers, the cancer claims have been filed and all of them have been denied. Larry's case is 4895. I'm in my second appeal process.

You keep doing what you have to do and work at

it hard. I talked to this gentleman here this morning, and I have nothing but respect for you guys. But again, Iowa is being left out of your process, and if there's some way that the Ordnance Plant and Iowa can get added to your list -- because how can you in reality get a true -- true cross-case mix without all of the plants being included. But I think DOL and I need to talk. Thank you very much.

DR. ZIEMER: Thank you. Your first name, ma'am, was -- was it Sharon?

MS. SHUMACHER-CORDING: Sharon.

DR. ZIEMER: Sharon. Thank you.

MR. THORNHILL: Gentlemen, could I have a couple of minutes? I'm not going to talk long. My name is George Thornhill. I worked at Mallinckrodt at Weldon Springs, and we had a meeting here about -- a few months ago and they called me and I was very excited to go because I thought I was going to get to see a bunch of my old friends. And I was just shocked when I got there what I seen. So many of them had cancer, and I want to thank God I don't have it. I'm one standing right here in front of you that, as far as I know, I don't have any

cancer. But I've been pallbearer for every one of my foremen I worked for out there. And I want to let you know, I've seen some very sick people that's suffered a lot.

We worked out there in the pilot plant at night. It's like all plants, when all the bosses go home, then you do all the things you wasn't supposed to do in the daytime. I seen us put stuff in these plants that birds flew over at night and them birds would fall flat out of the sky and die -- boom -- because of the nitric acid and stuff that we was dumping. And we was just doing our job. None of us knew we was exposed to anything. We didn't know anything at all was going on. We was making $2.16 an hour, big money, but that's what we did. And I worked there till the plant closed. But I didn't realize that so many of them was getting cancer and that's what they died from. And thank you for your time.

DR. ZIEMER: Thank you very much. We have about three minutes, if there is any further comment. We do have another public comment session later this afternoon. Yes, ma'am, please approach the mike.

UNIDENTIFIED: My dad died of lung cancer --

DR. ZIEMER: Would you state your name, please, for the record?

MS. IRWIN: Sue Irwin.

DR. ZIEMER: Sue Irwin?

MS. IRWIN: He lived three years after he was diagnosed with lung cancer, and we worked in nuclear plants from 1942 to 1957. And he was a very gifted welder, and because of this he was asked to work on the atomic bomb. And Dad said that it was so secret that not even his bosses knew what they was working on. And one of the sites that Dad worked on was -- he was working by hisself (sic) one night and a pipe broke, and he said he went in -- he went in to fix it, and he was saturated with nuclear waste.

He suffered from lung problems all of his life. He always carried Luden's cough drops in his pocket, and then he was diagnosed with lung cancer and he died.

But we have all of his medical records. We have information that he worked on six different sites, and I don't know what else it takes to prove that he was exposed to radiation. The last information we got, they

were still doing the dose reconstruction. So it's kind of a mystery, you know, why it's taken so long.

DR. ZIEMER: Thank you for those comments. We're going to recess now for approximately 15 minutes. We'll return and be addressing the regular agenda item, and then we will have another public comment session beginning at 4:30. So I declare us recessed now till 3:00 o'clock.

(Whereupon, a recess was taken from 2:45 p.m. to 3:10 p.m.)

SITE PROFILE REVIEW – BETHLEHEM STEEL

DR. ZIEMER: Following our Board meeting in December -- or during our Board meeting in December, we had before us on the agenda the site profile from Bethlehem Steel -- or the review of the site profile of Bethlehem Steel. And if you look in your minutes, Board members, on page 31 you'll see how -- you'll be reminded of the Board's action on that. And that was the Board request that NIOSH and SC&A respond to each other's reviews of the report and that the Board requests that NIOSH res-- the NIOSH response address each of the findings and

observations, with particular emphasis on the first two comments on page 8 of the report and so on. And in essence, we asked NIOSH and we asked SC&A to work together to resolve some differences that were evident at that meeting. We had Board members present during those times, also, to observe the intertake (sic) and exchange on that.

Today we're going to have a report from NIOSH which talks about those issues, and Dr. Neton will identify the issues that have been resolved between NIOSH and SC&A, will identify some issues where they -- there still is perhaps a disagreement or a difference in views, and there are a number of cases where NIOSH is specifically asking the Board to weigh in with its views on particular aspects of this.

So with that as an introductory comment, I'll call on Dr. Neton now to present NIOSH comments on the SC&A review of the Bethlehem Steel site profile review.

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

DR. ZIEMER: I'm sorry?

MR. PRESLEY: Henry.

DR. ZIEMER: Henry, are you there?
DR. ANDERSON: (Via telephone) Yes, I'm here.
DR. ZIEMER: Okay. And Dr. Neton is just getting ready to make the presentation.
DR. NETON: Thanks again, Dr. Ziemer. It's --
DR. ZIEMER: Thank you.
DR. NETON: -- my pleasure to be here in St. Louis this afternoon to talk about the Bethlehem Steel profile review, our comments on it. Dr. Ziemer gave a good part of my introductory remarks, so I think maybe I can speed things up a little bit here.
I would like to correct one thing, though. In our interaction with SC&A we did not have members of the Board present with those interactions. I think you may have been thinking about the dose reconstruction report reviews. This was -- essentially we went off and unilaterally worked on our report, but did interchange and receive some feedback verbally from SC&A on -- on their thoughts -- on their written thoughts.
And Dr. Ziemer's absolutely right, we've come to some -- some conclusions that are a little different than what I reported to last time.

There were -- in the report, to refresh everyone's memory, there were eight findings, seven observations, three procedural conformances identified, and six strengths, which were bulletized items at the back of the report, and I won't be discussing those today, for obvious reasons. But as we discussed earlier in the day, a finding, as defined by SC&A for purposes of this report, is something that represents a significant issue. It's likely, in the end of the day or the long run, to impact dose reconstruction. So this is the most serious nature of a finding or of a comment that they could make.

The seven observations were perceived weaknesses or deficiencies that we should go back to the drawing board, look at things, take a deeper, arm's length look at it and see if we really have covered that issue completely as we thought we may have.

And there's three procedural conformance issues. These are discrepancies related to our own way of doing business, whether it's the regulation or our own internal procedures, have we really done what we said we were going to do

consistently across the board.
I'm going to focus mostly on these findings today because these are areas that are more serious in nature -- at least identified by SC&A. They could impact dose reconstruction.
I am going to, at the end, summarize our discussion on some of the observations and go over the procedural conformances -- issues.
I will say that we've come to agreement on a large part of these findings, but there still remain some issues outstanding. And as Dr. Ziemer identified, we stand in front of the Board and ask their advice and opinion on this.
There are a couple of areas, and I'll point out at the appropriate time what those are.
Written reports were provided to the Board, I believe last Monday, via e-mail, so the Board should have received them. I also believe that there are copies at the back table for members of the public to review.
With that, I'll just get into it, and I could think of no better way than to go over the findings individually, so that's what I'll do, but I will focus primarily on -- I'll focus more effort on the first two findings, which is

what's -- which is the direction we received from the Board.

The first finding focused on the personnel monitoring data. As was established at the last meeting, we have no internal dosimetry data for workers at Bethlehem Steel. There are no urine samples to go -- to rely on to establish what the exposures may have been between 1949 to '52, so we relied on air sample estimates. SC&A has called into question the appropriateness of those air samples. In a sense, they didn't say that the air samples were inappropriate, it's just that NIOSH didn't do a very good job explaining that they were. And the fact is, we actually -- we agree with that.

We will -- as I indicate in the first bullet there, we do -- we do feel that the -- there are AEC documents out there that do support the use of air -- the air monitoring data that we used. If you recall last time, there were no air monitoring data available for the '49 and '50 time period at Bethlehem Steel, and we relied on the Simonds Saw and Steel air sample data, particularly the air samples taken on

October 27, 1948. Those we believe to be a situation -- and I think the report, SC&A's report, acknowledges this, if any of those air samples at Simonds were applicable, this time period was. There was no ventilation over the areas of the highest concentration and the radiological controls that were in place were probably about at their -- at their worst at that time. So we have these 40 or so air samples at Simonds Saw and Steel.

And then for our report, we had about 114 air samples that we relied on for the Bethlehem Steel, characterization 51 and 52. Since that time, a number of additional samples have come to light, and the total number available to date is somewhere around 200, although there are a number of samples that admittedly is -- it's hard to read the data. It's a little bit shaky. But somewhere close to 200 is the number of air samples we have available.

Why we say we believe that the AEC documents support the use of air samples is the actual October 27th report itself. It was the intention of the AEC personnel at that time to go and establish what the actual exposures were

to the workers in the facility. They went and took air samples that they believed were representative of various work locations, and established what's known in the business as a time-weighted average exposure. That in itself indicates that they had some confidence that the individual samples that were taken were -- were representative.

In addition to that, we've uncovered some documents that are more modern in time frame -- in the 1970's, I believe -- where AEC has outlined their approach. The person who took many of these air samples, and actually took a lot of the air samples at Bethlehem Steel, was a person named Al Breslin*, who many of you may know had been at the Health and Safety Laboratory for a long period of time. Al Breslin is a recognized expert, in my mind, on air sampling. He established these programs. And in the written document that we provided the Board, we've gone through and identified the highlights of what Mr. Breslin's approach was at that time. They go through and discuss what's -- what are known as process samples, general area samples and -- and breathing zone

samples.
Process samples -- and any of you who look at the air sample data, you'll see a P next to the air samples, that's a process sample that was taken to identify sort of the upper magnitude of the exposure. Even in Mr. Breslin's documentation he indicates that you should not use these samples to do doses or exposures to workers because they in fact -- no one received those exposures, they're high. An example of that would be putting an air sample right at the aperture of a furnace where a worker never really frequented, or right in the process stream of a rolling mill, whereas a worker may have had to have, because of physical constraints, been a foot or two away.
We actually used those process samples in our profile. So there are a number of reasons why we believe they're representative, but we do agree that the profile needs to be revised to support this consideration or this conclusion, and we're certainly committed and will be doing that, and we've actually started the process in that way.
This just speaks to what the finding itself

identified, that there were issues with quality. We had not defined the quality, applicability and reliability, and we're certainly going to do that.

And then this connection to ICRP-75 was identified by SC&A. That's our -- a general guidance document for radiation protection of workers. In that general document there's a section on air samples and it does speak to a lot of these type of issues -- what is a quality air sample, how reliable are they, when -- how should they be taken so that you ensure that you've really covered the workers' exposures.

One does need to remember, though, that for purposes of the compensation program we are not trying to accurately reconstruct every worker's exposures. We're -- if we don't know and have very little confidence on the accuracy of an individual exposure, we can rely on an upper value exposure where we're confident that no worker, or almost no workers were exposed above. So you have to distinguish between the accuracy of the dose reconstruction and the accuracy of the -- or the accuracy of the dose

and then the accuracy of the dose reconstruction.

This just goes through some of the rationale as to why we believe their task spe-- well, of the -- they are appropriate for reconstructing doses, and I think I -- I -- this slide I presented last time. I'm not going to go over it in any detail, but you know, these were task-specific evaluations, included measurements at work locations where maximum exposures -- I talked about the process samples.

Part of SC&A's report talked about the fact that these were short-term samples, which I believe tended to indicate to them that these were short-term samples and how could that be representative of the workers' exposure. The reason they were short-term samples is because that was the duration of the exposure. There are a number of 40-second samples taken at the rolling mill, at the face of the rolling mill, but that's the length of time it took for an 18-inch bar of uranium to actually traverse through the rolling mill and be done.

Again, the AEC Medical Division processed these

samples. I spoke last time about Dr. Naomi Harley who was responsible for many, if not all, the measurements that were taken at -- at at least Bethlehem Steel and provided a description of the quality control process or the -- the manner in which these were processed at EML.

And for the reasons I mentioned above, we believe that they are more representative samplings, as defined by ICRP-75, than what is conventionally known as a general area sample that is just taken there to monitor the workplace to ensure that the controls you put in place are adequate. These are a far cry from that type of sample.

This is a simple schematic of the layout of the rolling mill area at Simonds Saw and Steel. This is out of the profile that will be coming out shortly, but I put a little star here at all the locations where these -- there were 40 air samples taken I think on this particular day. Two were controls, so there's 38 net samples, and if you count these stars, they won't all add up to 38 because many were taken in triplicate. Most notably there were

triplicate samples taken on either side of the rolling mill here, and some over here where the material's being transferred from the furnace to the rolling mill.

There's -- there's two -- two stages here. The first pass is called a roughing mill. You take a five-inch bar of uranium, weighs about 200 pounds, push it through. You run it through a second time. The idea was to get about a 15 percent reduction in diameter each pass, and then two passes through the -- two passes through the finishing mill and they're done.

The highest air sample taken on each -- the highest average air sample taken is right here, the first pass through the rolling mill. It comes -- it came out of the furnace heated to about 1,200 degrees Fahrenheit, very oxidized surface because in the early days they were not done in a salt bath. They were done directly in the furnace and pushed right through here.

So this is where that 1,000 MAC air sample occurred -- 1,070 I think is the actual value, the highest recorded value at Simonds Saw and Steel.

The difference between this process and the one

at Bethlehem Steel is Bethlehem Steel is a continuous mill. There are essentially six stations like this connected sequentially so that when one puts the bar in at the first end, it goes right through and comes out already finished. None of this manual feeding through twice happens. It just goes right through the process. And that was done in the interest of speeding up the process, getting a better uranium product in a more timely manner.

Okay, finding number two -- and this is probably the most significant finding, in my mind, that appears in their report -- is that the triangular distribution was not statistically representative of the data -- of the Simonds Saw and Steel dataset. They also identify that -- they said the upper bound wasn't claimant favorable.

Actually we -- we took a look at this in some detail, and it turns out that there are -- and we recognized this early on -- there are two -- are two underlying lognormal distributions for these datasets, one for the Simonds Saw and Steel data, one for the Bethlehem Steel data. What we tried to do is to have a one-size-fits-

all with a triangular distribution to represent both 1949 to '50, '51 and '52. And in fact, in doing that, we tended to increase the exposure to the workers rather than decrease it, using the triangular.

I'm going to just skip ahead real quick to the next slide so I can explain that, and then I'll come back. This is the lognormal distribution of the data for the Simonds Saw and Steel.

This is a representation of the lognormal data for the Bethlehem Steel. First you can see the striking difference in the air concentration value, the tremendous difference. This is an order of magnitude or more lower than this, on average. And this is a representation of the triangular distribution.

Now the assertion by SC&A that the upper end does not go beyond 1,000 is true. But what happens when you sample this triangular distribution, you can see that there is a large gap between the upper -- the values in the upper air concentrations for the measured values and our -- our -- the curve we actually used. So when you go through in the Monte Carlo process and sample this, you end up

sampling a much higher frequency of values at the upper tail than if you were to use the actual lognormal distributions. So in fact what ends up happening is -- I've gone back and looked at about five to seven cases that were done using the triangular, and this is a rough approximation, but the actual values for the probability of causation dropped by about 30 percent if we were to take this curve and this curve and use them to calculate the workers' exposures.

So again, this is not a statistically precise model. It is the model that was used for dose reconstruction purposes.

Let me just go back now and talk about the second point, which I think is very relevant. SC&A, however, did make a very interesting observation, which is that this single facility distribution, this one-size-fits-all, may actually underestimate doses for maximally exposed workers. In other words, we sampled that whole distribution uniformly -- well, not uniformly, but in accordance with distributions -- frequency. What if a worker actually had his nose in rolling mill number one for ten

hours a day for 48 rollings? Then in fact it's correct, we would underestimate that worker's exposure. So in a sense, we conclude -- we concur with SC&A that the use of a frequency distribution is not appropriate, and we should go back and use something more representative of the highest exposed workers.

In an ideal world, we'd like to go back and identify who were the highest exposed and who weren't. We've done that, we've looked at the job descriptions provided by claimants. It's virtually impossible to make a determination that would stick, I think. I mean you're getting the claimant's job description maybe the last year they worked, not when they worked in '48. They may have changed jobs multiple times. And in fact, most of the job descriptions that I've seen put them in a position where they would be highly -- could be highly-exposed, let's put it that way -- laborers, millwrights, people that were in the general plant environment and not like cafeteria workers necessarily.

So to address this issue, we're going to model the air samples using the lognormal

distributions just as I indicated, distribution for Simonds and distribution for Bethlehem. But we're going to pick the 95th percentile value of that distribution and use that as a constant value to input into the dose reconstructions. We feel that this circumvents the issue of the highest exposed workers. It's claimant favorable for most workers and at least representative of the highest exposed workers.

This particular graph just depicts the fact that these samples do fit a lognormal distribution very well; correlation coefficients approaching, you know, unity; you get similar if not better fit for the Simonds Saw and Steel data.

Now one thing I want to point out, though, is SC&A report actually goes one step further than this. They say okay, the highest worker is at the 95th percentile. That seems reasonable. But how well do you really know that 95th percentile value. You only have three air samples at that upper limit. We agree that they were at the highest location. They were at rolling mill area number one -- three of the

five highest were at rolling mill number one. And so we were pretty confident we had the upper limit captured.

SC&A's approach is, let's say -- if we went out to the 95th percentile, which would be at 1.645 on this chart here, and say NIOSH were to use this value, they're saying well, you don't know that value very well; you should put some uncertainty bars -- those of you who do statistical analysis would recognize you'd put error bars about this curve -- but they weren't even saying that. They weren't saying put error bars about this curve. Put error bars about this individual point. Very difficult to do. And in fact, in their discussion, one gets the feeling that there's no really good statistical way to do that.

Well, we are going to stick with the 95th percentile for a number of reasons, and I've tried to outline these in three bullet items. One is that we believe that the rollings that were done at Bethlehem Steel in '51 and '52 -- they're much lower. We observed that with the air samples. But that the process used at Bethlehem Steel would result in lower air

samples, even in '49 and '50, if we had them. These are, (a), because they were finished rollings. Workers that we've talked to that worked in the plant at that time indicated that the six-inch bar mill, which had the six continuous rolling operations, only processed finished uranium. Matter of fact, the uranium that was actually produced at Mallinckrodt went to either Simonds Saw and Steel or Allegheny Ludlum for rough rolling. They rolled it down to about a two-and-a-half-inch bar. Then and only then would it go over to Bethlehem Steel to be finish-rolled down to a -- its ultimate diameter, about one-and-an-eighth inches. Secondly, the furnace operation. Remember I talked about this gas-fired furnace operation at Simonds Saw and Steel. Even at Simonds Saw and Steel at the end of 1949 they abolished the use of that because they realized it was too messy of an operation. So it's unlikely that any rollings occurred at Simonds Saw -- at Bethlehem Steel just using gas-fired furnaces. There are indications that furnaces were used, but it's what's called a muffled furnace. There's no direct contact, and it essentially

was a pre-heater before they put it into the salt bath itself.

The second and probably more important issue here is the time-weighted average exposure. Remember I said in October 27th, 1948 the purpose of collecting those 40 air samples at Simonds was to figure out what is the time-weighted average exposure to the workers. The time-weighted average exposure of the highest worker, using that analysis, was 190 times the maximum air sample -- air concentration. Our 95th percentile will end up using somewhere close to 600. So we feel that there's a margin of safety or conservatism built into that number to begin with, even given that the processes are not completely similar. We've analyzed this and we believe that it's fairly representative.

The third thing, which we've just indicated -- and this is not in your report, but you know how you get these flashes when you're driving home at times? Well, we had air sample data for Simonds Saw and Steel. And in fact, it was ta-- they were taken -- there's much air sample data available for Simonds Saw and Steel, but

there were a number of samples taken in fairly close proximity to October 27, 1948. So we're pretty comfortable that -- remember, I said it's important that -- early time frames there was no ventilation, or little -- no ventilation over the highest areas, anyway. So these workers -- they took 60 air samples total over what, six different time periods, well after the 27th. We really don't know if these workers continued to roll steel or not -- or uranium. I'm assuming they did, but let's say they didn't, and their only exposure was October 27th, what would be coming out in their urine if they breathed almost 600 times the maximum allowable air concentration for ten hours on that day? This is the urinary excretion curve that would be predicted.

Now here are the actual measured samples. So again, yet another proof or -- not proof, but indication that the -- the use of about 600 MAC is fairly indicative and in fact somewhat conservative representation of the workers' exposures at that time.

I think all these facts taken collectively give at least NIOSH a comfort level that the

exposures of using 600 MAC is a fairly reasonable estimate.

Okay. I'll move on. I know I took a little bit of time on that, but I think those were two --

MR. GRIFFON: Can I just ask a quick clarification on that, Jim?

DR. NETON: Yeah.

MR. GRIFFON: Did you run any -- any IREP models to compare how your outcomes came with just a constant value at the 95th versus your triangular distribution? I'm sure --

DR. NETON: I'm not sure exactly --

MR. GRIFFON: -- I mean did they always improve the POCs or increase the POCs? Did you -- in other words, did you take the -- you said you examined using the lognormal -- or the -- the lognormal distribution --

DR. NETON: Right.

MR. GRIFFON: -- versus the triangular --

DR. NETON: I used two lognormals, though, one for Bethlehem air data and one for Simonds air data --

MR. GRIFFON: Right.

DR. NETON: -- and when you use those together,

you will get a PC value that is lower every time.

MR. GRIFFON: Right.

DR. NETON: And the reason --

MR. GRIFFON: Did you do a similar comparison with your constant value at the 95th, though?

DR. NETON: Oh, the constant's going to go up because the effective air concentration's going to double. I think -- if you remember last time, the effective air concentration, which is really sort of what IREP ends up using, was about 334 MAC for the triangular.

MR. GRIFFON: Right.

DR. NETON: It's going to go up to about 600.

MR. GRIFFON: Right.

DR. NETON: I think these numbers --

MR. GRIFFON: (Unintelligible) discussions of the effect of the uncertainty on driving the POC model, but I just wanted to...

DR. NETON: Yeah, it turns out that the uncertainty distribution itself was -- it's equivalent of giving 334 MAC for the triangular. We will use -- don't quote me on this exactly -- it's about 600. We have to go back and make sure all the air sample data

we're using are appropriate and that sort of thing.

Okay. Finding number three talks about the selection of the minimum, mode, and maximum for table 2. There were two tables in the site profile, a lower table and an upper table. And what we did was, if any case would be -- appear to us to be over 50 percent for the lower table, we never bothered to use the upper table. The upper table is really the triangular distribution that we just talked about. It was the high table. The low table was based on Simonds -- or Bethlehem Steel actual air sample data -- much, much, much lower. The reason for that is, any cancer that was going to be compensable was -- I think almost with -- save one exception, was compensable under this low exposure model. In other words, the lung cancers, maybe the liver cancers, the ones that you would expect to have higher doses because of their metabolic behavior were all compensable under air sample concentrations similar to what happened at Bethlehem Steel in '51 and '52. You didn't need to have the Simonds Saw and Steel data in

there to drive that over compensability. Anyone that looked like it was under 50 percent, though, would have run under this much higher matrix that -- that looked -- that included the Simonds Saw and Steel data. And in fact, all of those cancers were also non-compensable under there.

We never used it, though, to make determination -- it obviously was confusing to SC&A -- since it was not really used to deny any cases or to calculate any cases that would appear to be denied, we're just going to take it out. It's not -- it's not going to affect the compensability for any case or future analysis. It's just too confusing to leave in there so we just feel it's most appropriate to take it out. So that finding I think we're in pretty good agreement on.

Finding number four is a little bit of a vexing issue for us. SC&A has talked about steel workers in a heavy environment may actually breathe through their mouth more than through their nose than either the general population or even the general worker. And honestly, I'm a little bit confused by the comments, because

they appear to say two things to us, but we've gone through and looked at this in some detail. If one looks at the ICRP-30 default values for heavy exercise, it assumes that a worker inspires at about three cubic meters per hour. That is a fairly hefty inhalation rate. And not only that, they assume that 50 percent of that time a worker is breathing through their mouth. So the comment that SC&A makes that we need to consider oro-nasal breathing I think is somewhat part and parcel built into the ICRP models.

We did not have all the workers in the original profile breathing at the heavy worker rate, but we concede that yes, we don't know that, so we're going to assume all workers were heavy workers.

Now I need to distinguish between heavy work and heavy exercise. This is an ICRP construct. It may be somewhat dense to folks, but the heavy work ends up being at 1.7 cubic meters per hour, and what that assumes -- and I just noticed there's a typo here -- it assumes 7/8 light exercise and 1/8 heavy exercise. So if you'd correct that in your notes it'd be good.

But in a sense what this is -- it's a hybrid. It says I'm a heavy worker and eight -- one hour out of the shift, if I'm working eight hours, I'm going to be breathing three cubic meters per hour, 50 percent through my mouth. So it acknowledges that a certain percentage of the time when you're working, you're going to be doing that.

I know of no job that breathes three cubic meters per hour. In fact, if you look through the ICRP values, I think for uranium miners in Africa they assume somewhere around 1.3 cubic meters per hour. I think uranium mining is a fairly demanding job, as well. So in some ways I'm puzzled why this was a finding because a finding means that -- that we've done something completely inappropriate and it really needs to be fixed, where I think this -- this falls more, in my mind, under the observation category where, you know, there's an indication. Maybe you ought to look further into this and do some more homework.

But nonetheless, we're willing to -- we're going to increase the model to 1.7 cubic meters per hour, which means that a percentage of the

time workers are going to be mouth breathing. Now one other way to read this report, though, it says that there's a table in there that talks about people who are habitual mouth-breathers. There is a certain segment of the population that breathes a good percentage of their -- through their mouth, no matter what. So by inclusion of that table, I'm not sure whether the SC&A report wants us to assume all workers are habitual mouth-breathers -- because there's no way in a compensation program we can go back and establish that for every worker, so that would then be the default -- or whether they're really just saying you need to maybe boost up this distribution here.

Now at this point NIOSH is standing with -- we believe the default value that's in ICRP for heavy work is appropriate. We see no real data or indication to the contrary here. But we're certainly interested in hearing the opinion of the Board on this. This one of these areas where we need -- we'd like to have some advice and discussion, and we're willing to reconsider this, depending on what the Board determines. Okay, finding five was the ingestion dose

estimates. We're low. They didn't include all the ingestion dose that a worker could have -- could have experienced by working at Bethlehem Steel. In looking at this, though, I think at the end of the day we were not in that much of a disagreement for the individual rolling days. On an individual day our air dispersion model, which just took all the amount of uranium in the air and deposited it on the ground, ended up with a worker ingesting about 20 milligrams of pure uranium. The SC&A report -- I wouldn't call it a recommendation, but suggested maybe an upper limit of 100 milligrams per day based on experience of workers in dusty trades like construction might be more appropriate. And we grant that.

But if you look at this, though, this is 20 milligrams of pure uranium. They are ingesting material in an environment that has a lot of steel dust around. If you talk to people like Ed Walker, he'll tell you that the uranium -- the iron dust in the plant was sometimes four inches thick. So in a sense what you're going to have is uranium deposited in this iron dust matrix, and so the fraction of the 100

milligrams that SC&A suggests, if it's around 20 percent, which I think is probably an upper estimate, we're not in too -- not in substantial disagreement, I don't think, here. I think one thing SC&A does disagree with is how our dispersion model came about. We're going to take a look at that and revisit the dispersion of air and deposition on surfaces. But I think at the end of the day we're not far apart with SC&A's reported recommendations. Where we still had a disagreement, though, was the exposure from ingestion due -- and inhalation, for that matter, in between rollings. And I'll address that under finding seven.

Finding six, the default particle deposition parameters were not claimant favorable. This again I don't think was based on -- and I think this, in my mind, more appropriately falls in the area of an observation, because there is no direct evidence provided by SC&A that particle sizes were smaller. They're suggesting that they could be.

Well, we've looked at the default -- the definition of default particle sizes for ICRP

and, to remind the Board, that assumes a five micron particle size, which is fairly consistent with work that involves operations involving mechanical processes. But it's important to remember that that five microns is not a fixed value. It has a geometric standard deviation associated with it, so it does allow for the existence of other particle sizes.

So we've looked at the ICRP recommendations here. We feel that it -- it bears to our conclusion that five is adequate. We also went and looked at some other facility -- publica-- published values at facilities. In fact, rolling milling operations. And again, five microns does not appear to be inconsistent with those studies.

And one thing I've ignored here is Simonds Saw actually, in 1950, went and did a particle size study where they took floor samples -- I forget the exact operation, but it's not unlike what you would experience at the mill -- and the particle sizes were very consistent. And in fact, with the standard -- with the geometric standard deviation 2.5, which is probably fortuitous, but the particle sizes are very

consistent with using five microns. So in our opinion there is no reason at this time, unless future evidence comes to the fore, that we would change that value.

Okay, this is what I talked about earlier where, you know, we did not have any exposure from residual contamination included in our model. In looking at this, we do now agree that we should include residual contamination. The evidence that we have to conclude that there was none was documentation indicating that they cleaned up between rollings. Uranium was a valuable commodity in metal at that time. And also we had an air -- a smear value. Remember I reported where they actually did a smear of the area before and after the rolling and indicated the area were clean. Well, the fact of the matter is, though, we only had one smear. And also from worker interviews that SC&A conducted, it led us to the conclusion that it would be pretty hard to clean up every atom of uranium and demonstrate it. So we do believe that there is credibility -- there's some credit that should be given for contamination in between rollings, and we stand

ready to do that.
We haven't fixed on the exact model yet, but we're going to include both inhalation and ingestion. There are some ways to do this. We can have -- we can model the ingestion after representative intakes of dust. Remember we talked about this 100 milligrams of ingestion per day -- may be higher, I'm not sure exactly where that's going to be fixed. But it does need to be -- one does need to take into account the dilution that occurs as you process steel and it mixes with this uranium. The amount -- the fraction of what you're ingesting of that 100 milligrams per day will go down between rollings, so we'll -- we will take that into consideration.
Also -- let's see intakes of dust -- oh, and then for the inhalation intakes, there are some published values that we're aware of for places like steel mills where -- you know, what is the dust loading in a steel mill just based on resuspension, no operations occurring, and what are people breathing in. And again, we can apportion the amount of the resus-- the fraction of the resuspension that's due to --

due to inhalation of steel -- or iron oxide, essentially, versus the amount of uranium that's in that. So we stand ready to do that and we've already started working on an approach to -- to that.

They did mention in their review that external doses need to be addressed, and we agree. We do believe they're going to be extremely small for residual contamination, but for completeness' sake we at least need to do some sort of a mention of that and cover -- cover the waterfront there.

Okay, the last finding, external dose due to various models -- modes of contact, this is an area where -- and this shows up also in the observations, that workers make assertions about well, I was holding or I was carrying metal. Your model only assumes that I'm -- I'm one foot from it, you know, at a certain amount of time. So we've gone back and looked at this a little closer. If you look at the annual dose of the distribution, it's 133 rem on an annual basis. It's a huge amount of external dose, particularly shallow dose, to give to a worker. So -- and we compared this to a

situation like where workers were working at Fernald between '52 and '55. The highest exposure was ten rem. They processed 20-something million pounds of uranium here and machined it. I think the highest that I can come up with is about 600,000 pounds per year production of processing of metal at Bethlehem Steel.

So here we have a facility that did a lot of work, the doses are much higher than the annualized mean. But we also need to do a better job -- and I'll talk about this in the observations -- of communicating that to the workers. If there's any shortcoming that we have in our profile, it's -- it's we didn't communicate how we arrove (sic) at these -- how we arrived at these conclusions.

Two years ago when we were putting this together, we wrote this, frankly, for a health physics group that was going to use this to do dose reconstructions. Now we understand fully that we need to go better and document why these -- these observations were used and how they speak to the sort of exposure scenarios that aren't exactly addressed.

I did a calculation -- if you take this mean value of exposure, it would be the equivalent to a worker either sitting on or carrying or holding an ingot of uranium for three hours every day. I mean so we allow -- I mean we don't say that the worker was in contact with it, but the equivalent dose would be delivered if three hours out of that entire day the worker was handling the uranium. So we don't believe that there's a huge issue here.

The observations I kind of lumped on one slide. Observations one, two, three, four and five are really the result of questions, worker -- worker questions, comments raised during either, separate and apart from SC&A's review, the rollings after '52; or SC&A interviewing workers and workers saying well, I worked more than ten hours, or I -- there were cobbles and they cut these things and there were these short, episodic events that occurred. Those are the kind of things that are covered in these observations. And as I just mentioned, we need to do a much better job explaining why the model we're using -- why 600 times the maximum allowable air concentration for ten

hours a day is sufficient to cover those types of episodic events that may have occurred, and why our external exposure model sufficiently addresses these other incidents where a worker may have actually had to grab a bar for a while, that sort of thing. And it really is a matter of doing a much better job explaining it.

Observation six questions why environmental exposure is not included. The fact is that we assumed all workers were occupationally exposed, so you know, the occupational exposure was the relevant metric. Environmental exposure when they're off work is not -- is not included, other than the fact that we will now add residual contamination, which I suppose one could consider that an environmental exposure, but you know, we assumed the workers were breathing very high occupational levels during entire work -- you know, the work episode.

Seven questions photofluorography. We agree that we need to evaluate that, and we've already started on looking through the use of photofluorography at Atomic Weapons Employers. If you remember, we focused early on at

photofluorography at Department of Energy facilities where there was large masses of people being screened. We don't know if photofluorography was really used at Bethlehem. If there's any indication at all there was, we're certainly going to include it. Early indications are -- we looked at some Simonds Saw and Steel medical evaluations, and they're not. Now that doesn't mean Bethlehem wasn't, but suffice it to say that if there's any doubt at all, we're going to go ahead and include photofluorography as a -- as a means of exposure for medical -- medical evaluations. Okay. In the last slide, about -- there was -- there was three procedural conformance issues raised. One had to do with the ICRP-75 guidance and I think I kind of discussed that a little bit. The other two had to do with the -- SC&A's opinion that NIOSH was required to use worst-case exposures for these calculations, and in fact we're not. I mean we do claimant favorable assumptions when the technology can't inform us or science can't inform us. But I think -- I think the root of this observation -- these issues were that it's -- we didn't do a

good enough job explaining the difference between a claimant favorable estimate and an intentional overestimate.

A claimant favorable estimate is when you have two equally plausible scenarios and both -- both seem reasonable, and one gives you a higher dose, we're going to pick the one that gives you the higher dose every time.

For part of the efficiency process, though, we've developed some -- some procedures, OTIB-4 I think is the one cited in the review, that provide intentional overestimates to what we believe to be demonstrably low exposure group -- worker groups. You know, whether they were cafeteria workers or administrative folks, we will say okay, that worker group certainly did not have anything more than 100 times the MAC over their entire work history for all time, and demonstrate that even under that scenario, the PC value is certainly going to be less than 50 percent.

That's a very different -- different beast. And so there is really no good reason why we should use that -- that document and apply it to someplace like a Bethlehem Steel.

Okay. I know this is not really germane to the review, but the question comes up often is what does this really mean in terms of cases' compensability. So I just have a slide here -- I apologize, it's slightly out of date, but we've done most of the Bethlehem Steel cases so probably not that different today. But you can see there's an extreme bimodal distribution of compensabilities here. About 43 percent of the cases were over 50 percent already. These have not been all through the Department of Labor. These are the dose reconstructions we've done, so based on the doses that we've calculated, sent over to Department of Labor, we believe that this many are going to be over 50 percent at the end of the day.

More significantly I think, though, is to point out that 44 percent of the cases, even given in the old profile, values are less than ten percent. Now the reason for this of course is the nature of the exposure. It's primarily the inhalation model that drives it. When you inhale uranium, uranium doesn't concentrate in the pancreas, it doesn't concentrate in the bladder or various other organs. So even under

these conditions, if this value were doing -- if these cases were to increase by an order of magnitude, factor of ten, it would not put them over 50 percent. This is not a linear scale. It's not five times this will get you over 50. It's not a linear scale at all, so these cases by and large would require more than ten times the dose.

So what I'm really saying is, with these adjustments that we've made or will make and are considering and will consider, based on the Board's advice, we don't see a wholesale shift in -- in compensability from the Department of Labor's final adjudication, even if we do modify the -- when we modify these profiles, how some of these cases end up being changed is hard to predict, but I suspect that there will be some change in these cases, particularly the ones in the 40 -- 30 to 40 percent range, but we -- it's very difficult to calculate -- estimate that. It's a really individual -- there's so many parameters that drive that that I couldn't tell you that today, and in fact we haven't revised the model yet. But I just wanted to point that out. I think it's very

significant to point out this bimodal distribution. And in fact I think this is not going to be uncommon for many of the sites where inhalation exposure drives compensability, places like uranium facilities, plutonium facilities, that sort of thing.

Okay, with that I've finished my formal remarks. I'll certainly be willing to take any questions.

DR. ZIEMER: Thank you, Jim. We'll have a moment for questions here. I want to remind the Board that on the Bethlehem site profile we do need to reach a kind of closure. I'm hopeful that we will reach that closure before we leave St. Louis this week.

The findings that Jim has gone through -- it appears that some of them have been largely resolved, but there are others where they -- where NIOSH has specifically indicated where they differ from SCA in terms of their view and where they have specifically asked -- for example, on page 6 of the narrative, not the power point presentation but page 6 of Jim's narrative, for example, in the second paragraph where it says NIOSH believes that the use of

the 95th percentile and so on adequately reflects the upper limit, but NIOSH is interested in hearing the Board's thoughts on this issue and is willing to reconsider our position based on the Board's recommendation. And there are several spots through the narrative where NIOSH has in fact asked for specific input. And in a sense, if the Board is able to address those issues, that will be a way of coming to closure. We have the opportunity to weigh in that we agree with NIOSH or we agree with SCA -- SC&A, or we believe that there's some other viewpoint or a mid view or whatever it may be, so we have that opportunity. And I hope as we begin to discuss -- and I think we can take some general questions -- and we may not be able to finish this yet today because we have a public comment session beginning at 4:30, but we can get underway here and we can ask questions, and then we can begin to deal with the specific issues and try to bring some level of closure to the Bethlehem site profile review.

So with that comment, Dr. Roessler, I see you have a comment or question?

DR. ROESSLER: My comment, and then a question. My comment is that I think that this is a very good process. As an individual Board member, I don't have the time and I -- and most -- many cases, don't have the expertise to evaluate the -- what do we have, hundreds or thousands it seems like of pages that are coming from SC&A, so I think to have this point and counterpoint for us is very productive. And my conclusion from this is that a lot of the findings can be addressed by just explaining better what NIOSH did. Some of them there is a disagreement. And I think by putting it out on the table like this where we can actually look at the individual specifics on this site is a good process.

My question, though, is is -- I'm thinking to the future -- is how -- how will this information we're getting from this particular site and the evaluation apply to future sites? Will this -- will NIOSH improve probably in explaining things? Will there be things that we resolve that will apply to future sites?

DR. ZIEMER: That's an excellent question and it's really a process question. And one might

reflect that this parallels the process for dose reconstructions. We basically at our last meeting set forth a sort of six-step process for how dose reconstruction reviews would be handled, and it may be that the Board would like to inaugurate a similar type of process for the site profile reviews where we -- we have an initial report of a site profile review that we then ask NIOSH and SC&A to go through this kind of process which involves both fact-finding -- that is, are the facts correct; where there's disagreements, is it a disagreement on actual -- the science or is it simply a factual misunderstanding or what's the nature of the disagreement, and try to then reach some consensus on those issues where it is simply a misunderstanding or an informational issue versus those where it's a pure, valid, scientific disagreement on either how one interprets or how one should apply the particular situation. But I think we must have, as we proceed forward, not only how we come to closure on this particular review, but what will the process be for future reviews. And this provides an opportunity for us to put

a kind of template in place for that.
Dr. Melius.
DR. MELIUS: (Off microphone) I actually had questions on some of the specific points, I don't know -- excuse me.
I actually had questions on some of the specific comments, so I don't know if people have some other -- Mark, do you have some general ones first? If not, I'll start.
MR. GRIFFON: Yeah, I was -- I was actually just going to propose a process, at least for this phase, for this report, but if you want to --
DR. ZIEMER: You might want to hear the question --
MR. GRIFFON: Right.
DR. ZIEMER: -- specific questions first then.
MR. GRIFFON: Yeah, so you might as well go first.
DR. MELIUS: And I'll start with comment -- SCA comment number two, I guess is where we're going through here.
DR. NETON: Procedural conformance comment or --
DR. MELIUS: Finding number two.

DR. NETON: Finding two, okay.
DR. MELIUS: Finding, yeah.
DR. ZIEMER: This is the triangular distribution comment?
DR. MELIUS: Yeah, it -- do that. And I guess my question is going through -- if we're adopting this as a way of going forward, are you assuming that the -- then the interview information in this application of this approach would not allow you to distinguish between people that were say more highly exposed than others? You made -- made that comment when you were presenting this and that -- and I didn't know whether it was one based on the interview information you have from the CATI interview or from your follow-up to the -- in talking to the workers and some of the follow-up that -- the meetings we've attended in Buffalo and so forth.
DR. NETON: That's a good question, and what I was speaking to was the -- the job category that is included in the application to the Department of Labor. There's a job title block and I forget where it appears, but -- then we look through the distribution of those, there's

543 and they were all over the map, but most all the workers indicated some type of job where one -- one could make a value judgment that they were fairly heavily exposed. So it really didn't seem to make any -- we couldn't tell from that where you -- where you draw the line, based on job title.

Now what you're speaking about is the CATI, the computer-assisted telephone interview. And first of all, I think roughly half, if not more, of our claimants are survivors, so that we're not going to get much information from them. So then you're left with the other 50 percent, who are active claimants, former workers, and yes, you're right, we could -- we could, based on the statements collected in that interview, maybe come to a better sense of their exposure situation.

How that plays out in an adjudicatory process and stuff is beyond me. I don't -- it would be very difficult -- we could, in a sense, parse out the ones who, like I said, well, I was a cafeteria worker and so I had no exposure. Now at that point then you're relying on the veracity of the claimant's statements and --

and -- I don't know, that's an area where I don't want to tread. That's a policy type thing. But in our opinion, it would be very difficult to stratify them in the -- in the large mass. There may be some, some small percentage that you could, based on the interview, come to the conclusion there was no exposure.

DR. MELIUS: Yeah, see -- see, what I'm struggling with is figuring out how this issue of which distribution to use and -- and how to use that distribution in terms of handling claims, how that interacts with individual dose -- individual claimants.

DR. NETON: Okay.

DR. MELIUS: Because essentially what you're doing with Bethlehem is coming up with one approach -- one metric that applies to everybody, and you just basically just plug in how long they worked there and what organ system --

DR. NETON: Correct.

DR. MELIUS: -- they have cancer, and does not at all take into account anything about their type of job or any -- any other individual

information. And that may be all that's available and therefore you have to come up with some approach there. There may be other situations where -- where there may be more individual information available, better work histories or whatever. But what you've done is a very generalized sort of an epidemiological approach, you're just -- though applying it to claims as opposed to what you would do for an epidemiological study or some study to generalize about exposures there. And I'm trying to get the context in which we're supposed to then make a recommendation to you as will this -- is this correct, and --

DR. NETON: Well, the approach here is no different than what the original site profile had, which is one-size-fits-all. All we're suggesting is that --

DR. MELIUS: Yeah, no --

DR. NETON: -- that the values are going to go up for the '49 and '50 time frame and --

DR. MELIUS: But what we're -- what we're tal-- discussing about is how to refine that, or should that approach be refined --

DR. NETON: Yeah, I agree with you, Dr. Melius.

DR. MELIUS: -- in some way, particularly -- and this particular issue is very much an issue of just how to refine that in a very methodological way.

DR. NETON: We're very interested in hearing the input from the Board on that. I will -- I will offer that -- remember I mentioned at the low exposure matrix, it doesn't take much inhalation exposure for a worker to move over into above 50 percent for -- for certain cancers, so does it really make any sense then to start stratifying and saying well, you had ten MAC exposure and you're over 50 percent, or you had 500 and you're over. It's sort of a economy there of efficiency -- the efficiency process.

DR. MELIUS: Right.

DR. NETON: But we're certainly very interested in hearing the Board's input on this.

DR. ZIEMER: Okay, additional comments or questions?

DR. NETON: Dr. Ziemer, if I -- finish here. I'd just like to point out that we did not want to presuppose that the Board was in total agreement with SC&A's findings, by the way. I

mean just because we're in agreement does not necessarily mean the Board should be, I suppose, and so --

DR. ZIEMER: Yes.

DR. NETON: -- I guess that's obvious, but --

DR. ZIEMER: Yes, thank you.

DR. NETON: -- I just wanted to state that.

DR. ZIEMER: Mark?

MR. GRIFFON: I guess what I was going to propose was you know, try -- in an attempt to try to come to resolution while we're in St. Louis, I like how you phrased that, not right now, but while we're in St. Louis. I wondered if we could ask our subcontractor tonight to give a one to two-page, very brief summary response to these -- to what's been pointed out today, and I think that all the arguments are out there, so this can really be a brief response. They can even cite previous arguments they've made if they still stick to those, but they don't have to re-- you know, they don't have to elaborate them any further, but just a matter of saying we agree with NIOSH's modifi-- you know, resolution for finding number one, we agree with -- you know,

we disagree with finding -- number two resolution for this matter and it's -- and it's expanded on in our report A or whatever, something to that effect that they can put together on short order and then we can -- then we can, in our deliberations tomorrow or Wednesday, compare the two and say -- you know, that -- that'll help us with a rationale and a final resolution for this -- this site profile report, I think. At least it will --

DR. ZIEMER: I think the Chair is going to ask the Designated Federal Official to make a determination on -- as to whether or not this can -- this is a kind of task, whether it's within the framework of the tasking of our contractor, whether the contractor would in fact be both prepared and able to do what you've just said, and --

DR. WADE: Let's take them in turn. I think it is within the scope of the contract, but let me turn to Dr. Mauro. Would -- would you and your staff be able to devote time this afternoon and this evening to putting together this one or two-page summary?

DR. MAURO: I guess the brief answer is

probably no, and the reason is -- first of all, let me say that I could see that a tremendous amount of work has been done on behalf of NIOSH to come to grips with so many complex issues, and now we're hearing a lot -- the positions taken by NIOSH -- the strategies. I don't think they are specific, but there are certainly strategies that have been outlined. I -- now I don't -- our team consists of a group of perhaps eight people, including numerous statisticians, internal dosimetrists, health physicists, industrial hygienists that collectively prepare our work and our work -- our report. I would think it would be presumptuous on my part to come forward with a position on such short notice without a deliberative process within my team. So I would say I'd prefer not to be put in that position at this time.

However, I believe we can -- our team can reconvene and -- to discuss these matters. Now the only question is again a process question. Were we to reconvene our team and I were to communicate -- and we were to communicate to the rest of the team our understanding -- which

I, by the way, I do fully feel I do fully understand, and the rationale behind it -- and there's also a lot of material that Dr. Neton had made reference to, very important material; for example, the information regarding the diameter of the particles, that is new data. So in effect, what we have here is a preview of what one would consider to be a -- either an addendum to the site profile, perhaps a rev to the site profile, that would contain a lot more descriptive material, the supporting documentation, the rationale. By way of process, I guess I would be thinking that we, our team, under the direction of the Board, we would not take any steps along these matters, would I guess be on the receiving end of a -- of a more complete offering as this is -- certainly this was a terrific overview and a -- but I think the proc-- the next step in the process is once that material has been assembled, let's say by NIOSH and presented to the Board, at that time I would say that Board may want to request that we have one of these meetings similar to the one we had at Mallinckrodt where we go through each one of

these.
We would like, of course, an opportunity to receive that material, have a chance to deliberate amongst our full team, which includes the full spectrum of scientific and engineering disciplines, and then have a meeting with NIOSH, in a public setting similar to the Mallinckrodt meeting, where we can go through this list and perhaps at that point actually go -- check off okay, here's still something that might be outstanding.
So I have to say -- to answer your question again, I -- I would say I would rather not try to do that this evening.
DR. ZIEMER: Thank you, John. I think the Board fully understands what that looks like from your point of view.
And -- but -- and Mark, that also may play into what we need to think about in terms of our own process then and what the role of the contractor would be in this kind of situation.
Jim?
DR. MELIUS: Yeah, I have a couple of comments on that. First of all, I personally would be interested in at least having some response, if

appropriate, from SC&A as to whether the NIOSH response did address their comments. I'm a little confused, for example, about finding number six, and it may be that I didn't understand and I was actually sort of flipping through my papers when -- trying to find this when Jim was doing his presentation, but it seemed to me, at least from my -- the previous presentation on this and the current presenta-- it wasn't clear to me that that -- that NIOSH's response did address what SC&A's actually comments were, which seemed to be more of an organ-specific issue, as opposed to a general issue about particle distribution. I may have misunderstood you, Jim, and -- and so forth, but I guess I would be interested if there were any other issues like that.

If not, I think we need to -- I don't think we can expect SC&A to do a full response, nor should they. There's a lot here in the NIOSH response which I think is future work on their part, also. I think -- and what I take out of this is that they were going to make some modifications, however that will be done, to the site profile. I think then the Board has

to make a decision later on as to do we review that? NIOSH may -- may want a decision. How should that be reviewed? And that would be more appropriate, but I don't think we can come to closure on that, other than the sense of -- of I think we have to say yeah, we agree with the general approach NIOSH is taking on these issues. They're going to further explore some of these issues, get further information. I have some comments at some point where we could -- would reinforce what I think should be done on some of these issues. But again, I don't think we can expect SC&A and NIOSH to come to sort of full agreement and closure at this point in time.

DR. WADE: Just a general observation for my part. I think that the -- that both parties have come a long way towards resolving issues. I think SC&A is to be complimented, as are the staff at NIOSH. I think we've come a long way. The question the Board has to contemplate is how far do you take this process and when do you, as you said, Dr. Melius, when do you say to NIOSH please go forward and do what you say and bring back that modified site profile for

the Board to look at again. So again, I think we're coming towards the tail of the curve. The question is how far do we go.

DR. ZIEMER: Other comments? Or questions? What -- what is the Board's pleasure on the specific questions that NIOSH has asked? There are one, two, three, four --

DR. MELIUS: Could I ask --

DR. ZIEMER: I see four specific places where NIOSH has asked for Board input.

DR. MELIUS: And on finding number six, Jim started to get up to respond, and then I think he --

DR. ZIEMER: Oh, sorry, Jim.

DR. MELIUS: -- may be responding to my lack of understanding, so --

DR. NETON: Yeah, I might have been not clear enough on finding number six, but the crux of the issue -- as our understanding -- is that there could have been smaller particle sizes at Simonds Saw and Steel that were not covered by the representative or default five micron particle size distribution. And I think what you see in their discussion is examples of the doses to various organs that could be higher if

the particle size distribution were skewed more towards the smaller particles. So it's not so much an organ-specific issue. It is is it plausible that the AMAD, the aerodynamic median activity diameter of the particles is substantially less than five microns, as specified in the default by ICRP so that our dose reconstructions are in error for -- to those organs that they've identified. But the crux of the issue is -- you know, we first have to establish is five-micron default acceptable or not.

DR. MELIUS: Thank you, Jim. That helps.

DR. ZIEMER: Wanda Munn.

MS. MUNN: It would certainly be helpful to me if we could articulate very specifically exactly what we've been asked to do today. If we as a Board could respond to those four, then perhaps we would have a -- we did say four, didn't we? Then perhaps we would have a better grasp of how much further this rather iterative process has to go on. There's significant concern, and I think justifiably so, that we will never have perfect information. We will have to decide when we have adequate

information to pursue in as fair a manner as possible. So perhaps we could start with articulating those four.

DR. ZIEMER: Let me identify the four, and it may be that you'll want to cogitate on these further this evening and deliberate more tomorrow, but the first of them -- I'm looking now at the narrative of Dr. Neton's presentation, not the power point part. I believe the first one is on page 6, the second paragraph. That is the issue of the -- the air sampling distributions. It's the triangular distribution versus the lognormal distribution issue and whether or not their selection of the 95th percentile, I believe on the triangular, adequately reflects the upper limit of exposures for the workers. That's -- that's the first one.

And what they've said is NIOSH is interested in hearing the Board's thoughts on this issue.

The second one is near the bottom --

DR. NETON: Dr. Ziemer, could I just interrupt one second, please?

DR. ZIEMER: Yes.

DR. NETON: It really wasn't on the triangular.

It was on the use of the lognormal distribution.

DR. ZIEMER: Use of the lognormal, but it's under the discussion of the triangular, yes. And then the second one is at the bottom of the page, and that is the selection of the -- the default inhalation mode. This has to do with the mouth/nose breathing issue. It's articulated at -- in the last paragraph of page 6. And again, the last sentence says (reading) If the Board believes that the default inhalation mode for workers at Bethlehem Steel should be habitual mouth breathing rather than the default values recommended by ICRP, NIOSH will reconsider this position.

So that would be the second issue.

The third one is set forth on page 8, the second paragraph. Toward the end of the paragraph it says NIOSH believes the site profile adequately and appropriately addresses the particle size and deposition properties of uranium aerosols at Bethlehem Steel. NIOSH is interested in hearing the Board's thoughts on this issue and is willing to reconsider our position based on the Board's recommendation.

This is the issue Jim was just talking about, I believe, is the five micron default issue, and the possibility of higher doses from smaller particle size.

Let me ask one clarification there, 'cause I don't recall, in the SC&A were -- was SC&A -- were you talking about a -- was it a .1 micron monodisperse or was it -- what was the size?

DR. MAURO: No, I -- in that case the point we were making is that one micron AMAD as opposed to five micron AMAD could make a difference. And a little bit more rationale for the basis for selecting a five micron AMAD would have been appreciated. We recognize that ICRP does recommend as a default value, lacking better information, going with a five micron AMAD. But at the same time does not rule out using some smaller value if in fact it's appropriate. So I guess the point we were making there is we'd like to hear a little bit more about that. And now Jim has pointed out that there are some data, which is very interesting, where he's saying that he sees 2.5 micron AMAD particles and -- and I have to -- I -- since this is a subject near and dear to my heart that I -- I'm

familiar with and given the density of the particle, we're talking about a two-micron in diameter particle, then when you factor in the density of the material, which could be five, seven grams per centimeter cubed, all of a sudden we're talking about an AMAD that's above five. So I would say, on first blush -- now I'm almost like going back on what I said before, but it happens to be a subject I'm familiar with, I would very much like to see the information Jim has regarding the particle size, AMAD, and given the fact that we're talking about densities that are fairly high, his arguments about five micron AMAD becomes very compelling.

DR. ZIEMER: Okay, let me -- let me see if I understand now. On the five micron -- Jim, NIOSH is talking about an AMAD, aerodynamic mean diameter, which takes into consideration the density, does it not, of the particle?

DR. NETON: (Off microphone) (Unintelligible)

DR. ZIEMER: Yes, okay. So -- so the only -- the only differential here is what one would select for the mean aerodynamic diameter and both assuming at lognormal distribution. You -

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DR. MAURO: I'd go as far as to say that this happens to be one of the ones where I think we got closure. This happens to be one of the issues that I think -- you know, not -- assuming that we have the data --

DR. ZIEMER: Be careful what you say.

DR. MAURO: -- we have -- we have closure that is -- I think the -- given that the type of evidence that Jim has just made re-- is there, what I would say is that five micron AMAD as the default value for this particular exposure scenario we're talking about certainly seems to be appropriate and reasonable based on the information Jim just presented.

I take the risk of saying that with my colleagues sitting to my left. I'm cert-- my sense is, though, that since this is a subject that I -- sort of out in front of, I -- I will take the liberty to say that I think we've got one here that we could put in the check column. Thank you.

DR. ZIEMER: And the main point, though, was to justify the selection of it then. Yeah, thank you very much.

And then the -- on page 10 -- on page 10, paragraph three, NIOSH does not believe it's necessary to adjust the external exposure values in the site profile. NIOSH is interested in hearing the opinion of the Board on this issue.

So I believe, Dr. Mauro, those are the items that NIOSH has asked for specific feedback on. I think what I'm -- what I would like to do at this time, if the Board's agreeable, is allow you some time to think about these things. We have other work sessions later in the week. I want to move on to the public comment session, unless Dr. Roessler, you have a pressing comment before we do that?

DR. ROESSLER: I think so, because we just saw how easily one of these was handled by Dr. Mauro addressing this specific point that we were going to address. I find it really difficult to cogitate about the other ones, even overnight or over another day, without having some sort of general comments or instruction or guidance from SC&A. After all, they're our subcontractor. I think they deserve to give us --

DR. ZIEMER: Well, and one of --
DR. ROESSLER: -- some guidance on --
DR. ZIEMER: -- the possible responses would be not necessarily to resolve the issue at this meeting, but to instruct NIOSH and our contractor as to how they should go forward, and that's another thing you can cogitate on. I like to use that Indiana phrase, cogitate. Okay? Is that an Indiana phrase? It sounds like it, doesn't it? Hoosiers. I can say that, I'm one.

GENERAL PUBLIC COMMENT

Now we have a public comment period coming up. Before we actually have public comment, let me introduce some folks who are here, and I hope we don't overlook anyone we should, and I'll ask them just to stand so they can be recognized -- and I hope I pronounce names correctly. Tom Horgan with Senator Bond's office -- Tom, are you still here? There's Tom. Thank you. Debbie Dornfeld with Senator Talent's office -- Debbie here? Thank you, in the back. Jim Mitus*, is it, Mitus, from Representative Todd Aiken's office. Jim, do we have that correct?

MR. MITUS: That's correct.

DR. ZIEMER: Thank you. Welcome, all of you. Also here this afternoon we're pleased to have Mayor Graham, who is Mayor of the City of O'Fallon, Illinois, and he's requested -- been requested to attend and would like to address the group during the public comment period, so we'd be pleased to hear from Mayor Graham. Are you here, sir? Thank you. Please approach the mike.

MAYOR GRAHAM: Thank you very much for helping me out. I have a City Council meeting tonight, but I had some comments. First I'm going to start by showing you my correspondence over the last two years dealing with my parents. I grew up on the Iowa Army Ammunition Plant in Burlington, Iowa. I lived there from 1948 through 1966 when I graduated from the University of Iowa. I want to thank the committee and especially Senator Harkin and Senator Bond for the work they are doing and making me informed.

I just am going to be fairly brief. Both of my parents worked at the plant. I worked at the plant. My uncle and aunt worked at the plant.

I have a brother and sister that worked out there. My father worked on Line 1, which was the top atomic energy line, security clearance, that -- for those 30 years. My mother worked on various lines.

What I'm trying to get at is there was a lot of exposure out there. My parents would have taken a job at that plant at that time even if they'd known the exposure, because that's -- that's how it worked. They grew up during the Depression. They came up and wanted to work. But what we're upset about is the process, and I know you're trying to get through that. It's very disconcerting to have thousands of people -- I grew up there, I know many of the people that worked there. I knew many of the people that have passed on. To have to go back and reconstruct a medical history back to 1948, provide that information, mail it in and then receive response after response back saying that at that particular plant they cannot provide the exposure for those people. They don't have any records. So it's very difficult, as I talk to people in my home town and they're saying well, here we are. We

provided it.
We can prove that these people died of cancer, which is one of the criteria. But at the same time, on the -- and I'm going to say the government, and as part of the government, I understand; it's frustrating for both parties. Okay? But the reconstruction of the exposure cannot be done. Many of these people -- I actually worked out there on these lines -- would be yellow. They would turn yellow from the products we handled -- their face, their hands -- and none of this has been explained to this date.
In addition to that, actually growing up on that ordnance plant -- and it was a wonderful place to live, I'll tell you that now. But in my back yard I could see the test shells that they fired out there. Some of them did contain test traces of radioactivity. Everyone at that ordnance plant ate from the gardens. Now we all have heard of Chernobyl and we know that there have been medical problems from the wind-carried radioactivity in those areas. I've requested on many occasions the -- I think they've done soil samples. None of those are

forthcoming.
My point is is that all these people have been hurt. They don't want anything free. We don't really -- you know, I'll live fine. My parents are dead. That isn't the point. What they're upset about and what you need to understand is that it took all of those years till 2000 till this was disclosed to them, all these medical problems they've had for all these years.
And I appreciate what you're doing, but when they send these form letters out that this is full of, I think that I am of average intelligence. Now some people would argue because I'm a mayor, so I'll just tell you that now, but I don't think the average person can go through this process and file most of these claim forms, even though you've provided the 800 numbers. You call the 800 numbers, many of the people are part-time. So if you call for Mary Ann today or Tom tomorrow, they'll tell you well, they will be working next Thursday. So it's just -- the process needs to be cleaned up. The program needs to be -- if you're going to send out and say look, if there's cancer involved, you're going to be paid -- and I have

several letters that say that -- then if they prove cancer, you know people are upset, just give them the rules, the criteria, and let's move forward. People deserve answers and I think that's what you're doing. Thank you for your time today, sir.

DR. ZIEMER: And thank you, Mr. Mayor, for being with us today.

We're going to proceed with the public comment period. I would like to point out if you do wish to make comments that if you have particular issues that deal with your own -- with a case, if you're a claimant or relative of a claimant, we -- we would ask that you not ask this Board to, in the public forum, deal with your case. You're welcome to share with us your story, but if you have particular issues, be sure to see one of the NIOSH staff people so that they can follow up with you after the meeting. You know, if you want to know where some document is or what has to happen next in particular cases. We're more -- this Board is here to hear your comments, but we are not in a position to answer, in the public forum, questions about particular cases,

is -- I hope you all understand that situation. So we're going to proceed --

UNIDENTIFIED: Excuse me, there was a lot of people that came in on a bus and what time does that bus leave, 6:30?

DR. ZIEMER: The question is, there's people that have come in on a bus?

UNIDENTIFIED: Okay, we were wondering about the time.

DR. ZIEMER: Let me tell you how many names I have here. I have -- I have 27 people who have asked to address the assembly, and we -- we have -- we have set aside an hour and I think we can go over that if we need to, you know, go a little longer than that, but you need -- if you are addressing the assembly, you need to be fair to your fellow addressees and -- and save time for them, too, so -- and --

MS. BROCK: Dr. Ziemer --

DR. ZIEMER: Denise, yes.

MS. BROCK: I was just curious if anyone would mind if the people that rode in on a bus -- we provided some public transportation, but it does leave at a certain time. I don't know if that would be 6:00 or 6:30. If anyone would

mind if those people went maybe first or if we started running over before the bus -- so the bus doesn't leave without them, if they could make comment?

DR. ZIEMER: That would be fine if --

MS. BROCK: I think there's only ten, so --

DR. ZIEMER: If those that are the bus group, if you would take it upon yourselves to come to the mike first -- who are the bus -- the folks on the bus? Would one of you just start -- you need to indicate who you are and then sequentially just come to the mike.

The Chair must excuse himself briefly, and I will be back. It's not that I don't want to hear what you say, but the Chair must take a comfort break. Lew, if you will --

DR. WADE: Sure.

MS. DANIEL: My name is Gwen Daniel and I'm speaking for my husband, Carl Daniel, who worked at the uranium division of Mallinckrodt from 1954 to '66, and then he worked downtown at the Mallinckrodt -- at the Mallinckrodt plant in the plants, and he died of cancer four years ago, of lung cancer.

I myself -- I know this isn't brought up, but I

went to school out at the Weldon Spring School during the '50's, and a lot of my classmates have died of cancer and I -- myself included. I haven't died yet, but I have had mouth cancer and had to have part of my jawbone removed, but apparently there's a lot of residual contamination out there and was during the '50's. That's all.

DR. WADE: Could I have your name again, please? I'm sorry, ma'am. Your name?

MS. DANIEL: Gwen Daniel.

DR. WADE: Thank you. Other bus riders? Okay, let me get the -- let's just go down the list then according to the time that you signed in. The next name that I have is Fran Ryan. Is Fran with us?

MS. STROPES*: This -- this is Fran Ryan, my sister, and I'm reading her comments. Three of my -- my name is Fran Ryan, and mine is Flo Stropes, and I'm the elder sibling of our father, Frederick Summers*, who worked at Mallinckrodt in the '30's, '40's, '50's and '60's. He was a very excellent employee. Three of my family members worked at Mallinckrodt. Back in 1943 Mallinckrodt

workers were told they were performing a partic-- a patriotic duty. Unfortunately, without their knowledge or consent, they were being exposed to unacceptable levels of radiation. This has been compared to human experimentation that took place in concentration camps during World War II. Many of these people helped make the atomic bombs that ended World War II. And later, nuclear weapons that protected America during the Cold War. In 2000 the compensation program was set up to help workers and their survivors. The difficulty arises in proceeding -- in providing the burden of proof. The reason for it is the company records are missing or destroyed, and doctors are retired or dead. In 2005 Senator Christopher Bond introduced a bill which would help ease the burden of proof for former workers at Mallinckrodt Chemical company. Senator Bond's measure was unanimously approved by the Senate. We are forever grateful to Senator Bond for all of his assistance.

When I was 22 I watched my father, Fred Summers, die. I took care of him at night

after I came home from work. I gave him pain shots, which is one of the hardest things I've ever done. Then some six years later I watched my sister Annie -- she worked at Weldon Springs, as well as Destrehan -- become sick. I will never forget the Saturday morning walking in with my mother, and my three-year-old nephew running up to us saying "I can't wake Mommy. I even tried waking her with my drum." And then his 16-year-old sister coming in and saying "I think Mom is gone." My sister should not have died that young and left these young kids. Even they were never the same again.

Since some of the reports came out I've had to relive these memories again, causing great pain once more. The injustice of course in my sister Annie's case is that if the reports would have been public, she wouldn't have -- she would have -- wouldn't have lived but her suffering could have been made eased more.

I have watched my other sister, Delores Stuckenschneider, suffer through cancer twice and always live with the fear that it will come back. She worked also at Weldon Springs and

Destrehan.
After 9/11 President Bush was quick to offer the survivors $1 million. America didn't cause 9/11. It was caused by terrorists from Saudi Arabia. This proves that we are a generous country. In contrast, the atomic energy workers have been waiting five years for compensation. In fact, some have died waiting. They are made to feel like criminals in a court of law. They are waiting for compensation for something that was caused by their own government, without their knowledge or consent. I would suggest that while you are in town you visit Weldon Springs and see for yourself what a toxic waste site it is. None of us here, myself included, would have -- and myself, my sister -- would have been here if it hadn't been for my father and those who worked with him at -- in the '40's. He helped to make the bomb components that ended World War II. What would have happened had they not done that? And let's not forget the men who worked in the '50's and helped to win the Cold War.
When I was sitting with my dad taking care of him at the end, he kept saying "bill of

lading," and it stuck in my mind and all those years it never made sense until those reports came out. And I think maybe he wanted to tell me this. I don't know, I can only guess. What I do know is that my father was one of the great generations of Americans. He worked at Mallinckrodt's in the '40's, '50's and '60's. He taught his five children a lot about responsibility, loyalty and love. The atomic energy workers have shown they're patriots. Now is the time for you to show them you appreciate what they did for America.

I did not write any comments, but I'd like to make a few. I want to know who -- who was running the show at that time? Why weren't these protected with safety measures? I'm a nurse and I've been a nurse over 60 years. We have lots of ways that we protect thing, you know, that -- that you're -- that you're exposed to. If -- if that had been done, would you be here today or would we be here today?

DR. WADE: Thank you both very much.

DR. ZIEMER: Thank you. Who's next? We still have more people from the bus?

DR. WADE: No, we have no bus people.

DR. ZIEMER: No more bus people, okay. Dan McKeel? Dan is from Washington University St. Louis.

DR. MCKEEL: Yes, sir. Good afternoon. I'm a pathologist at Washington University, and I was also here in October at the 2003 meeting. But today I'd like to briefly address just three aspects of the Mallinckrodt Special Exposure Cohort petition that you'll hear about tomorrow and discuss.

The first is that I really am quite puzzled and very disappointed that the Mallinckrodt SEC that we're going to hear about appears not to cover MCW uranium division workers who worked for the same company but did not work at the Destrehan plants 2, 4, 6 or 7 from 1942 -- from '57, but who did work at Weldon Spring and/or Hematite. And I also -- and those people worked in the '50's, and then this also does not cover the construction workers, the truckers who worked for MCW uranium division for multiple agencies, the Atomic Energy Commission, ERDA, Department of Energy, at any of those three sites covered at any period. And I think this is very unfair and very

unjust.
Now perhaps that's going to be done in the future, but I really think it should be done with this proposal.
I also believe that the Mallinckrodt site profile should have included and should include in the future multiple technical basis documents, not just the one for the Destrehan Street facility, but also for Weldon Spring and Hematite. The latter two components have not appeared on the NIOSH docket. I did see one paper today that said that it was being prepared for the end of April this year for Weldon Spring. Nor have the site profiles been posted on the OCAS/NIOSH web site.
I was made aware that there was a site profile meeting last week at the Weldon Spring Superfund interpretive site. And I guess my comment is that if these kind of meetings are being held about the Weldon Spring site, or Hematite, that they should be advertised and that all the stakeholders should know about them. And I wonder why this meeting wasn't made -- made known-about.
Last time I addressed the committee I was

concerned about two articles by ORAU'S Dr. Elizabeth DuPree-Ellis, and I questioned then why those two documents were not included in the Mallinckrodt site profile. I definitely think they should be included in this new Rev. 1 of the Mallinckrodt Technical Basis Document that I understand was extensively discussed last month at the TBD review held at the Cincinnati NIOSH office. I've attached these two copies this time so that if you wish to include them, you may do that.

But I am struck by the fact that SC&A, who prepared the draft evaluations of the SEC petition, found that NIOSH was unable to do adequate MCW dose reconstructions for 1942 through '48, and that they came up with the interesting conclusion, I thought, that the -- although they had dose data from 1949 to '57, they had to ask the Board for advice because they questioned the validity of the data. And these kind of considerations tell me that my fall 2003 concerns about missing and inadequate MCW dose data in the ORAU scientific papers were quite on target.

For that reason, and others, I believe that the

entire MCW cohort, '42 to '57 inclusive, should be awarded SEC status and receive compensation without further fruitless attempts to do accurate dose reconstructions with flawed or missing radiation dose data.

My final point is a brief procedural concern, and that is that on Friday, I believe, approximately 570 new pages of documents pertinent to the SEC petition for Mallinckrodt were placed on the -- on your web site, just a few days before this meeting today. There was a disclaimer that the draft SEC evaluation by SC&A had not been even reviewed by the Advisory Board. This late posting was reminiscent of what happened before the -- before the -- the 2003 meeting when the TBD was approved and posted on the NIOSH web site on October 24th, just four days prior to the 28th/29th meeting. And I would simply suggest that this time period is insufficient to allow careful consideration of these reports by either the public or the Board.

Anyway, thank you very much. I appreciate the work you're doing. I do appreciate your letting us comment.

DR. ZIEMER: Thank you, Dr. McKeel. The Chair would like to comment -- in terms of the posting of the SC&A reports -- that at the time of the Bethlehem Steel report the Board was operating under a policy that we would not post these in advance of the Board meeting. This was objected to greatly by the Bethlehem Steel people, some of whom are here in the audience today, and the Board revised its policy to make the document, in its draft form, available to everyone at the same time it became available to the Board. That is -- that is why it was on the site and, in the interest of public transparency, the document becomes available to everyone at the same time it becomes available to the Board. So I hope you understand why that is. We had not reviewed it yet, either, and that's why the disclaimer. It's the report. We're glad to have input from you or anyone else on the report, but that's the reason. We want to make everything available that we have for our deliberations.

Let me continue now. We have Mr. Ed Walker. Ed actually is a Bethlehem person. Ed?

MR. WALKER: Thank you, Doctor. It's a

pleasure seeing you all again. I want to thank you for the opportunity to talk in here and from what I've heard there's a lot of people here that have almost the same issues that we have up at Bethlehem Steel. So I've cut my speech in half, which I'm sure'll make y'all happy, but there -- there are a few issues and -- and maybe tomorrow, so if there's a public speaking period I may have a few more.

But really in respect for these people that are here -- I'm with Bethlehem Steel Group and I have cancer and I'm a claimant from Buffalo, New York. And I put my claim in in 2001 and I've been denied a few times. And the -- I'm here kind of to talk today on the site profile and the size of Simonds Saw facility, which they used. And I'd like to ask Dr. Neton a question. What size was the Simonds Saw facility, do you know, where they actually worked on uranium? Do you have any idea?

DR. NETON: (Off microphone) The size of the (unintelligible) inch rolling mill where we got the high air samples?

MR. WALKER: Yeah, where the two rollers are at.

DR. ZIEMER: For the record, I think -- we can't hear Dr. Neton's response.

MR. WALKER: Oh, okay.

DR. ZIEMER: If you do want to respond --

MR. WALKER: It's kind -- it's kind of important or I wouldn't ask.

DR. NETON: Yeah, I don't have the exact dimensions with me, but I'm sure we can obtain that. But as indicated in the drawing, there are -- there were two rolling mills positioned fairly next to each other, and a furnace and then a quenching table and a weighing station, but I don't -- I don't know the exact dimensions of that area of the facility.

MR. WALKER: Okay. I -- I went out there and visited the site. I took my wife for a ride one day, and we only live about an hour from it, and I couldn't get to it, either. It was blocked off, but I could see from a distance, and I would say the facility was -- probably wasn't much further than here from the wall in front of us and possibly to the side of us. It was just a section of a plant that had two rollers in it and it was on a mud floor and it had a platform so they could slide their

uranium or steel, whatever they had, by hand -- they put this up on the platform. And the reason I'm telling you the size of this building is because Bethlehem Steel building that we worked in uranium in was about 1,000 feet long. It was around 30, 40 feet high and about -- I'm -- and this I'm kind of guessing at, I -- I have talked to people but it's kind of iffy; some say 70 feet wide, some say 50, but it was a pretty wide building. But after these bars that were rolled with uranium, which were a continuous rolling, as Jim Neton said, they would go onto a rolling table, and that was a series of rollers.

Now this rolling table that I'm referring to, and I got this information from people that worked there. I was there myself. Some of them were more familiar, could give me a more accurate description. I got drawings at home. What actually happened, they had rollers and shears. This -- this rolling table alone, after it went through this six stands of uranium, is 375 feet long. To put that in perspective, that's about four times the length of this building. It was around 50 feet wide,

so I'm guessing maybe half -- this is just the roller bed inside the building. I'm guessing a little -- little wider than here -- here to the side, and it was all rollers. As the steel come off these hot -- out of these hot stands, it would roll out. There was dogs -- what we called dogs that would come up and -- this was all rolling, all the dust falling down, and it would put the steel aside and store it till they want, then they would drop it in and roll it down again.

Now we're told and Mr. Neton said that -- I've seen the reports, too, that says that this facility was cleaned up at the end of every rolling so it would be ready for steel rolling. Okay.

Underneath this rolling bed, which was about three -- three feet off the floor, was a basement. And in this basement -- it's eight foot tall, and all these gears and that that roll -- that move these bars from one side on this -- on this cooling table was operating to move this around. It was full of nothing but gears, shafts, chains and they had to clean that out periodically. They had five men to

clean that out.
Now if you read the documentation, it says that if they finished their rolling by the next day when the shift came in, this place would be clean of uranium. The crew was usually five men, if everybody showed up for work. Most of the rollings were done on a Sunday. I cannot phantom (sic) -- I worked in the plant myself, I worked on the furnaces, I cannot phantom (sic) that place being anywhere nears clean, knowing how some of the workers worked down there. There -- there wouldn't be a chance -- any equipment you took in there, vacuum cleaner or anything, to clean up that area down below. That's a full cellar underneath this whole bed four times as long -- and I hope you understand my concern. There's -- this drops down. All the scab -- scaling fall off these rollers that goes down. This was never cleaned up. We can't go there today because the government went in and filled it full of concrete. That whole lower level, the whole floor that -- the place was filled in. So there are no records there. There's no way of getting them.
And then the other problem I had -- and this

isn't taken in consideration in the technical base data. There's -- there's no allowance taken, no air samples taken down there, nothing. And it was just virtually impossible. There's wires, there's electric motors. That's all buried in concrete. So no readings could be taken, no readings were taken.

Now these guys that worked down there, it wasn't (unintelligible) standing next to a bar going by you for ten hours. This was every night that they went in. So I don't believe you can get a dose construction (sic) out of something like that.

Then constantly throughout the documents it talks about machining and grinding. What's worse than machining and grinding on uranium? I've talked to men that worked there. There's billet preparation before they could even roll these things. They would be going through grinders and -- like 50 tons. There's never no air samples taken where this grinding was done. And you have to remember, Bethlehem Steel had no equipment at all to protect themselves, either to breathe or eat the stuff, 'cause it was in the air.

And we're talking about the air samples, and this is not a lie. I was 18 years old when I worked there, and I would go in there and every man at the end of the shift -- every man that come out of there, when you would cough it was like licorice. You would cough for maybe 20 minutes when you come out of there with black stuff. And I'm sure there's ore dust in there. I mean I'm not going to argue that. A lot of it -- may be more than that, but we had no idea how much uranium was mixed in with it.

Every -- every man in my locker room I can remember as a kid, and I can still remember, just got brought up to me, in the corner of their eye was black, a dot, like sleep in your eye. They'd come back from the job carrying their tool bag, just -- just like somebody had taken chalk and covered their face black. And this was every day. And again, some of it -- and probably a lot of it -- was ore dust, but what about the people that worked in uranium? So -- and my contention is this kind of stuff wasn't monitored.

So the billet preparation room where they -- when they got these billets, they had to prep

them, and this is mentioned -- this isn't something that it's my little story. This is mentioned in the declassified documentation I got. There's nothing mentioned in the dose reconstruction at all about any air samples taken at the billet preparation. If you're going to prep 50 ton of steel, that wasn't done ten minutes before you -- you started up the rollers. That had to be done maybe days before.

There's so many uncertainties in the Bethlehem Steel plant that I don't know how you could complete a dose reconstruction, you can modify it all you want. And the one bad thing about it is, it was last June -- we -- I've been getting denied 15 months I've been denied on a technical base document that supposedly had a site profile on it. Last June we had a meeting and I was told -- and it's documented -- that that's the first time anybody ever spoke to anybody worked at Bethlehem Steel. I got a crew of 15 -- around 15 people together. We had a meeting. We explained this kind of stuff -- not quite to this detail that I have now because you constantly learn every day -- but

that's the first time that NIOSH ever spoke to -- I was being denied for 15 months on a technical base document that had none of this stuff in it.

Not only that, I ate that stuff. And I had a display out at that meeting. I sat there and I ate my sandwiches and stuff. It was never mentioned in the technical base document. Then all of a sudden, we -- we redone the technical base document and it was included. Why wasn't it included when the document was first put out 15 months earlier because reports from Simonds Saw said that you can't get a proper dose reconstruction without ingestion. Now if you had had a document from Simonds Saw and you were reading it and you based our site profile on it, you would have -- have to have seen it. So -- well, I've used up my own time, so at that -- our group and the group I represent from Buffalo just would -- maybe if you can get me an answer before I leave and go back to Buffalo. Just how long do we have to wait? We've been waiting -- shouldn't this stuff been done when the program started? Here we are four years later and we've gotten no place at

this point. Until the audit came out and we got some people digging in and finding out this information, it meant nothing, what I said or anybody said went on. We were just -- we were cut right off. And I think this is a wrong in the most fundamental value in American justice, really, for the Bethlehem workers and for these people down here. Thank you.

DR. ZIEMER: Okay. Thank you, Ed. Let's see, Brown -- is it --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: I'm sorry? Is it Rena -- Rena Brown? I'm -- I'm having trouble reading the writing here.

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Huh?

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Oh, okay. Tom?

UNIDENTIFIED: (Off microphone) I pass.

DR. ZIEMER: Oh, okay. Thank you. Delores Stuckens?

MS. STUCKENSCHNEIDER*: Stuckenschneider.

DR. ZIEMER: Stuckenschneider, okay. I didn't go past the line here. Okay.

MS. STUCKENSCHNEIDER: I am Delores Stuckenschneider, and first I would like to thank you for coming to St. Louis again. I'm a former employee of Mallinckrodt Chemical Works and worked at the Destrehan and Weldon Springs plant for nine years. Before I read my statement, I want to thank Senator Bond for all the help he's giving -- is trying to give us to obtain this compensation. I really appreciate it. And my heartfelt thanks to Denise Brock, who's worked so hard for all of us for the last several years.

The first time I heard about the compensation was in the St. Louis Post Dispatch on January 12, 2001, four years ago. Former Secretary of Energy Bill Richardson said, quote, This compensation that has bipartisan approval is for workers who were sickened or died from exposure to radiation or other hazardous substances while working on nuclear weapons. He added, quote, This is the law. It is an entitlement program not dependent on appropriations, and this is going to happen.

He also stated, quote, Workers need to contact us, but the burden of proof is on the government, not the workers. We will help workers determine their eligibility.

But four years later, we're still waiting.

When I read the article about the reason for the compensation, I was shocked. Then it turned to anger and disappointment that my own government has put me and others in harm's way, without our knowledge or consent. I couldn't believe it. I lost a father and a sister because of this.

I'm having trouble seeing today, too.

I attended the first meeting held here in St. Louis at the Millennium Hotel July the 26th, 2001. There were representatives from the Department of Energy and Department of Labor present. I understood them to say that they would be able to get our employment records, medical records, and even records from insurance companies on medical bills we paid years ago. When I sent in my application it said to enclose employment records and medical records.

After three requests by mail and phone,

Mallinckrodt sent me a certified letter stating they had no record of me working for them. I couldn't believe that, either.

Finally the Department of Labor sent to Social Security for the dates. This delayed my application from moving forward for several months. With my application I sent the surgeon's report, pathology report showing it was a rare type of breast cancer, and X-ray reports, all of which I thought was enough to prove I had cancer. I was later informed I needed a letter from my oncologist stating that he administered chemotherapy to me after the surgery. They also wanted to know what chemo drugs he used for both cancers, and wanted the stage of the lung metastasis.

My oncologist's secretary told me he said, quote, They should know that a metastasis to both lungs is stage four.

I understood the burden of proof would not be on the workers, but it's getting to the point -- oh, why bother. And I think if it had not been for Denise Brock getting involved, a lot of us would have given up.

After I graduated from high school I applied

and was accepted for a position at Mallinckrodt Chemical Works. I was overjoyed, and when I found out I would be working for the Atomic Energy Commission, that made it even better. I had just turned 18 years old, and I thought it was so cool that I was going to be investigated by the FBI and they were going to check my school, family, friends and neighbors so I could have a secret clearance to work there. The pay was good, and I would be working in a company my dad and sister worked at. How much better could it get?

As I found out later, working there came with a high price and we paid it. My dad and sister are now deceased, in my opinion because of their employment at Mallinckrodt. My sister died at the age of 39, leaving two young children, and my dad died at 68.

My dad worked at Mallinckrodt in the shipping yard area at the main plant for 45 years, from 1917 to 1962. He died at age 68 of lung cancer. My dad had no desire to retire at 65, but was told he had to. Unless someone can prove otherwise, I am convinced now that his last X-rays at Mallinckrodt showed he had spots

on his lungs and this was the reason he was made to retire. I have been stonewalled in my attempt to get his medical records from the Department of Energy under the Freedom of Information Act.

While working at Mallinckrodt I don't remember my dad taking sick days. He didn't believe in them. And he never complained of feeling bad. It was only after he retired that he told us he didn't feel well. I have no medical training, but I think I have heard lung cancer cannot be detected on an X-ray for several years. If Dad had known what he had had earlier, he had a better chance of surviving. At 67 he went to surgery, but the surgeon said the cancer had traveled through his whole body, and he died six months later.

I have heard from plant workers who said that they knew they were taking part in making atomic bombs, but they didn't know the dangers. As I worked in the office, I had no idea this was the ultimate goal, or that I was in any danger. We were told not to discuss our job with anyone, at work or at home.

I received 91 pages of my medical history at

Mallinckrodt. Now, since I've learned the dangers we were exposed to, I realize why we received a physical every year, and records were kept of our sick days and the nature of our illnesses. I was surprised that it supposedly showed my radiation exposure from a film badge. I didn't wear a film badge. I wore an identification badge showing I had a Q clearance, and I took it home every day. To the best of my knowledge, I never turned it in. A few times I would forget to bring my badge, and since I worked in the plant area I had to get a guest badge from the security guards. This might be where they got the exposure information. When I got this badge I did the same as I did with my identification badge, and that was to put it in my purse or pocket. I took it out when I had to pass the security guards, so this would be the only time it was out in the open. It's hard for me to find their claim monitoring my exposure credible. I understand your purpose here today is to focus on the Destrehan plant, and I hope you do what is right for the workers here, and also at Weldon Springs. I think many of us worked at

both plants, and since both plants were Mallinckrodt Chemical Works, I can't understand how or why the Destrehan plant site profile was completed over a year ago and Weldon Springs hasn't been started yet.

I submitted my application July 27th, 2001. It wasn't until April, 2004 that my claim finally made it to the last major process to completion. I'd call and check on the status every three or four months, and my last call was January 3rd of this year. I was told by someone at Oak Ridge Associated Universities that they're waiting on a couple of documents before they can begin the Weldon Spring site profile, and it might be started in April of 2005. Then I have to wait who knows how long to have a physicist examine it. Now I'm told there's a conflict of interest and it's on hold.

I don't think I'm the only one who feels that a fair reconstruction dosage is impossible to get on Weldon Spring employees. Unless you were actually there in the plants, there's no way one can tell or even guess what the employees were exposed to and in what way. Weldon

Springs is now a seven-story-high tomb of radioactive waste and is called a, quote, tourist attraction, unquote. The fact that the plant and all its contents were buried tells me the whole area was contaminated and too dangerous to move. If you have never seen it, I hope all of you will take time to go and look at it. And if you feel safe, maybe take the steps to the top of the mound. Frankly, I wouldn't trust it myself.

At Weldon Springs I was a clerk-typist in the Plant 6 office. My office was connected to the plant area by two inside doors. Plant workers came in the office, as did office workers into the plant. I recall putting on paper coverings for my shoes, which I didn't always remember to do. I don't recall worker -- plant workers having a change of clothing when they came into the office. Almost everything we worked with or handled came directly from the plant area.

I would like to mention that a lady I worked with in the same office at Destrehan and Weldon Springs also had a rare type of breast cancer, the same as I did. I am the first one in my family to have breast cancer, and she told me

she was also the first in hers. Coincidence? I don't think so.

I mentioned this before in a statement I read when you were here in 2003 about all the dust that accumulated on our desks daily, and I had to walk outside between the plant and the main building several times every other day to relieve the switchboard operator. And like some of the other women, the nylons I wore, which were mandatory, were short-lived. They would tear and shred. Mallinckrodt had start reimbursing us for them, so they did know what was causing this. The odor coming out of the stacks was sometimes overwhelming, and it's kind of scary now to know what we were inhaling this all the time.

It's good that the government is finally acknowledging what was done to the nuclear workers and giving the compensation, but unfortunately it can't bring back employees that have died. It can't give back the years of suffering cancer (unintelligible). I hope the present government -- or anyone, for that matter -- learns from this that no one has the right to put anyone's health or lives in danger

without their knowledge and consent. It really upsets me that we are waiting so long to receive this compensation. This is surely bureaucracy at its worst. It's sad that several employees that I know of have died since the compensation has started. I am hoping that the present government will show compassion and make restitution for the wrongs that were made to the nuclear workers before any more former workers pass away.

Last, but certainly not least, I would ask that you pass the administrative SEC that Denise Brock has petitioned. The SEC has got to cover all the years that work was done for the Atomic Energy Commission at Destrehan and Weldon Springs. It really is the only fair and right thing to do. Thanks for listening.

DR. ZIEMER: Thank you, Delores. Next I have Anthony Windisch.

MR. WINDISCH: Given that much documentation about radiation exposure has been lost or destroyed, I can really appreciate the difficult task that you, the committee, are having with dose reconstruction. In trying to do dose reconstruction, did you study the work

habits and the environment of those many workers who have already died of cancer? And would any person who worked in that same environment have enough radiation to also die of cancer? Please consider that in view of lost or destroyed documentation. It's one thing to play with graphs and everything else, but us people out here who are waiting for a decision by -- by your -- your people don't really understand a lot of those charts and what they mean.

The bottom line is that many of our coworkers have already died of cancer, and we're wondering if we have to be dead before we have any chance of getting compensation. Thank you for the job you're doing, and thank you for your attention.

DR. ZIEMER: Thank you, Anthony. Next I have Janet Davis. Or Janette, maybe, Janette Davis? It appears to be Janette or Janet, Janette.

MS. DAVIS: Yeah, I wonder who put my name down? Well, I'll say a little bit (unintelligible).

DR. ZIEMER: One of your friends signed you up, did they?

MS. DAVIS: Well, they might've. I did work for Mallinckrodt since 1951 until 1959, and I was down at Destrehan for about seven years, I guess. And then I went out to Weldon Springs for two years.

One thing that kind of irks me is about hearing that things are lost. I worked in the lab. I did a lot of testing on everything there was -- well, down at Plant 6. I was there when they closed down because I couldn't get a ride out to Weldon, and I tested everything that we really knew what the radioactivity was there. It was on record. Whatever -- whatever happened to it, I don't know. And being's I was the last one -- one of the last ones down at Plant 6, I did a lot of testing out at Weldon Springs, and we knew what the radioactivity was out there. I don't know what happened to the records.

And I was one of the dumb ones that I kept one of my check stubs, and I know what my check clock -- the clock card number was because I was so proud of that check. I was making a little bit more money than my husband was then, and I kept it. And for some reason, I told my

family, keep this because I don't know -- if something ever happens and I'm gone, that you've got something that I worked there, and I still have that stub today.

Mom told me way back, she said Janette, is -- is it really safe there, and I said well, sure, Mom; they say it's low grade radiation, radio-- ation, and she said they remember people that used to wet a little brush and they painted the numbers on a watch and it was called radium, and -- are you going to have any trouble with this? No, I -- no trouble. Well, here I am. I did a lot of work in the spec lab and, as I say, I couldn't get a ride out to Weldon so I was one of the last ones, and I learned every job there was in the lab, and it was up to me then whenever things came through that I would work in that particular little area. I think I will write down a lot of the things. Someone said to me today, you know, you really ought to write a lot of that down because a lot of those people aren't here today, and I guess I'm getting to be one of the last ones.

I've got a lot of things wrong with me, and you know what, they can't find out why. And I'm

told well, you're going to have to live with it, and I have been living with it for many years. I couldn't go to work because I can't drive. I have vertigo real bad, and -- been to the doctors at Barnes, still get the answer, can't help you, you'll have to live with it. So I really don't know if any of that pertains to this or not, but I'm here listening, and -- I did worry about Weldon, though, about things getting into the wells. Maybe I'm saying things I shouldn't say, but I'm being honest. Oh, and I did -- and when I did work down at Plant 6, one of the last jobs I had is -- they had sewers, and I didn't know what the sewers were. And they told me that they were the holes, and they had like either bricks in them, and I guess they flushed a lot of the -- would we call it sludge or -- this liquid into these sewers, and then it was my job at the very end to test those before they were flushed into the river. Well, one time I ran like the devil to try to get somebody over me because boy, did I have a high radium conte-- or uranium content. And in those days -- oh, it was too late; it was flushed. And I was told that -- that would

have been in the '50's -- about $10,000. There wasn't said -- too much said then that it was the uranium that went in there, but -- I could go on, just little things that I saw.
I saw the trucks pull out and the stuff would be steaming that would be in the truck, and I think back a lot about a lot of that. And that was a hot spot then. That was hot in the north -- in north St. Louis. I don't think people realized what they were living around. And one time we had a big tank blow up. We didn't know what it was. We were told to stay by our job. And you weren't supposed to talk too much to the other people. You had your work to do, you did it, and -- so you stay -- I was doing spectrographic work and I stayed by it. And I thought gee, I really ought to let my folks know that I'm going to be late, you know, getting home. And so when things kind of quieted down and I called Mom and she said well, gee, I know exactly what happened. I said well, I can't tell you what it's about, but I'm going to be here for a while. And it was on the news and the radio and -- you know. But that was an empty tank that blew and blew

the wall out and it -- it was interesting. Interesting work.

I did get a call from one of the reporters from the Post Dispatch a couple of years ago, and I said well, Mister, I really can't talk this over with you. If you show me your credentials, why -- and then maybe I can. And so then when it was in the paper and they told the different parts per million and different things, well, then I felt well, I guess it's out now so it's okay.

But it was fun watching them when we left Plant 6 and they had the little model of what Weldon Springs was going to look like. We were going to have a lot less contamination in the system because that was glass instead of what we -- what we had in Plant 6 that was metal. And it was -- those were just a few of the things I knew, but thanks for giving me your time. I didn't know I had so much I could talk about, but if you have any questions, I'll be glad to help you.

DR. ZIEMER: Okay. Next, Louis Mc-- McKeel, McKeel. Louise?

MS. MCKEEL: I guess I'm the videographer and I

don't normally speak, but I do think I will now because I've collected a lot on this particular topic and about Weldon Spring. And I have some feelings, if not all the facts that Dan has. Actually I want to say, too, that I have quite a few facts at my house because I counted up 154 filing drawers in my house. Not all of them are on the Weldon Springs topic, but I could tell you the exact number and then you'd know exactly how much we know. But we -- Dan -- I'm going to go on about this just a little bit.

Dan began by going to Busch Wildlife to just relax after the 80-hour week that he has at Barnes Hospital. And I said Dan, you know, there might be a little problem out there. And he was very believing and saying -- I mean we're part of people who've been in nice neighborhoods, good schools, we're not used to the government fudging on us. We thought we knew the people in the government. Some of them are our ancestors and stuff like that. So we weren't expecting the worst.

But then I got him interested in just looking, and now it's several years later. And I think

Dan is really angry. I think he's more angry than I'm about to confess myself, but we think that the basic thing that we have noticed, just as citizens who started out going to Busch Wildlife Reserve, is that the Department of Energy and all the people associated, everybody who belongs to an agency in this room, is kidding us, me and Dan and a lot of the people here. And by this time I have a lot of tape to show you all, talking about things and the way -- I mean I just made some notes at lunch, and I know you're bored and the bus is leaving, but I also have spent a lot of time behind the camera and I'm going on a little bit.

We're al-- Dan and I are always looking for facts and statistics. I can brag that I got an A in statistics in social work school at Washington University for my master's degree in social work, so I know a little bit about it. And I'm interested in it, besides. Maybe that's why I even take up topics like this.

I want to say, too, that Dan and I have been married 43 years, and I think the -- we had what I believe I heard lately, a beautiful ambition to try to be a good doctor and try to

deliver health care to the community and the world that we knew at that time. And we really haven't deviated from that just a whole lot in the 43 years, and I can still stay that. And it's in that spirit that I'm kind of appalled at what I got on my yards and yards, my miles, no less, of videotape. But anyway, some of the things that bother me, just from this morning, and I'm a little bit off the street. I don't know everything here, but things that just concern me a lot -- dose calculation could be accurate. I mean everybody seems to just forget that fact that it's -- that it is -- that you don't have the records. They seem to just let that go by. But there should have been records. There could have been records. If I'd been a secretary in anybody's office in this room and I'd lost the records, I think I'd have been fired. And especially important records that have to do with people's health, with their lives, with their death and with their -- their families for a generation or more to come. How could you lose such records? What is that? Unless of course it might be a little

deliberate, it occurs to me, after I tape a few miles of videotape about it.

And I see selective memory here. I mean, you know, if it's beneficial on one side, well, then you might be able to do that. But if it's not beneficial, then you probably can't, and on and on.

But anyway, the dose calculation's based on badges. You know, the people standing here in -- in various feet of measurements of yellow cake, I hear and things. A badge doesn't necessarily even measure all of that. And badges can malfunction. I know every little thing that you have can do that. A lot of times we've been hearing where people just didn't wear them all or most of the time.

Certainly I have heard that people working in these conditions weren't told. And I really do not believe that they were. Some, perhaps, but probably not. Even -- even the most -- the least educated people who I've talked to about this have common sense. And they just weren't -- that nobody appealed to their common sense, and that angers me just as a wife and mother and human being on the planet.

Anyway, they didn't wear -- a lot of times they didn't wear their badge during the most dangerous parts of the job. Some of this is rumor, but then again, I think there are people here who could probably confirm some of that. Another thing about -- I think they didn't check the arithmetic on adding up about the badges. I mean everything is fluffy about the numbers on this thing. It's well, you know, it might be -- but it is not concrete. There is not the data. There is not a level of fact that I think that most people could expect from -- from an ordinary secretary. And I believe, as a taxpayer -- I feel doubly vulnerable. I think that what could be going on here is a way to try to appease and try to make it seem and put these folks off and you know how hard it is to get here and everybody's dying and all these other problems, delay, I guess we could get to -- in psychology you can go through the defense mechanisms and you can use all of those to get out of the situation. But the point being that when -- the fact really is that the taxpayer might become vulnerable to this after all. They might wind up needing to pay more for

these people than everybody here seems to kind of think that they might get out of. And that would be bad for me, the taxpayer, my kids, and then basically everybody in the room and all that, but taxpayer might need to pay for that. In the meantime, the taxpayer needs to pay for 28 meetings to discover what I feel plainly and boldly and perhaps meanly and crassly are very fluffy thoughts about not addressing the basic human needs of the workers in this room, in this nation, and probably in the world. So I'm just going to say that on my first day here, and maybe I'll hear some things that'll make me feel better.

DR. ZIEMER: Okay. Thank you, Louise. Next we'll go to William Headrick. William I believe has some overheads, too, that he's going to use. Is that correct, William?

MR. HEADRICK: That is correct.

DR. ZIEMER: All right.

MR. HEADRICK: I have a power point presentation loaded on the computer. Should I come up and start it or...

DR. ZIEMER: Let's -- I think Chris is going to help you out here.

(Pause)

MR. HEADRICK: Thank you. First of all, I'm a little young to have worked at Mallinckrodt or Weldon Springs, so I put together a slide presentation and this is from a letter that my mother wrote for the July 9th, 2003 meeting which she wasn't able to attend because of illness.

My mother was Shirley Joyce Headrick and she's currently deceased.

She was born on July 28th of 1935. She passed away November 15th of 2004. She worked at Mallinckrodt from August 5th, 1953 at the Destrehan Street plant to August 15th, 1959. I'll get into August 15th, 1959 a little more in a minute. At that day she was transferred to Weldon Spring where she worked until December 31st, 1967.

This is a synopsis of the letter, which I'm going to read to you. Your letter telling of a meeting of Mallinckrodt claimants to be held on Wednesday, July 9th, 2003 at the Iron Workers Local No. 396 hall 2500 59 St. Louis from 6:00 to 10:00 p.m. has been received. It is my hope to be present, but the health condition of

myself and my husband may not permit our attendance. If you want to read the following into your record, please feel free to do so.
I am one of the former nuclear workers from Mallinckrodt Destrehan site and Weldon Springs who has lung cancer. On August 14th, 2002 surgery on my left lung, with removal of a bronchioloalvaolar carcinoma, commonly known as Carr's carcinoma, left, my left lung was performed. Right lung tumors are inoperable due to proximity to veins and artery. Only one percent have this type of lung cancer, and probable cause are pollutions or radiation, with surgery as the only recourse. Chemo or radiation treatments are not effective.
Having seen the November 24th, 2002 article in the Post Dispatch, contacted you for assistance and information in filing a claim. Following is the summary of events which followed.
December 18th, 2002, U.S. Department of Labor acknowledges receipt of claim for benefits under the Energy Employees Occupational Illness Compensation Program of 2002.
January 30th, 2003, Department of Energy, Washington, D.C. acknowledged application from

assistance from EEOICPA.
March 3rd, 2003, U.S. Department of Labor advised DOE cannot confirm employment history, nor can Mallinckrodt, Incorporated.
Actually, they told her she didn't work there. However, she contacted the Social Security Administration to corraborate (sic) the employment information. Now nobody wanted to believe her documents that showed she'd worked there.
March 14th, 2003, EEOICPA writes DOE advised us they have no information on you.
April 2nd in 2003 she telephoned DOE and was advised when Weldon Spring facilities closed contaminated records were shredded and not available.
June 16th, Social Security records pertaining -- - received proving that she was a Mallinckrodt employee from 1953 through 1967.
June 11th, 2003, Department of Labor acknowledged full support for my claim record, copy of case file referred to NIOSH for evaluation of dose reconstruction.
She was shocked to read, quote -- from NIOSH, when done for research purposes, dose

reconstructions may take months to years to complete. In compensation programs a balance between efficiency and precision is needed. When the process is fully implemented it will be possible to develop reasonable estimates of the time needed to complete a dose reconstruction.

June 25th, 2003 NIOSH received case file showing Department of Labor has determined her employment and health condition are covered over the EEOICPA Act. NIOSH plans to request radiation exposure information data from DOE, who had already advised her that the information was destroyed due to contamination. Here's her opinion that was included in the letter.

All of this sounds like delay tactics and cover-up with money spent on bureaucratic procedures. If records of my employment were destroyed due to contamination, am I also waste material to be destroyed? How does $200 billion for massive cleanup of sites, $70 million for radiation dose estimates, compare with $150,000 per worker with cancer who breathed alpha or beta-emitting isotopes, as

well as being exposed to gamma radiation. Radiation exposure was given a very low priority, and protection standards negligible compared to today. Refer to Missouri Resource Review, Volume 8, Number 21, summer of 1991. We definitely need Special Exposure Cohort status. Shirley J. Headrick.

Now, since then my mother's passed away, and she's asked me to pursue this for her. Give you a few of the dates. August 14th, 2002 was the diagnosis date. This is after they'd removed half of her lung. June 16, 2003, claim received from DOL. June 25th, 2003, letter sent to claimant. August 25, 2003, telephone interview, we're moving fast here, doing good work. October 15th, 2003, report sent to claimant. What happened for a year? August 18th, 2004, conflict of interest letter sent to claimant. November 15th, 2004, claimant passes away during cancer surgery. January, 2005, I received a letter from NIOSH. Dose reconstruction not started. No explanation. They haven't felt like starting it since August 14th, 2002.

Employment information while she was at

Mallinckrodt. Enlarged lymph node removed in 1958 by Mallinckrodt physician at Barnes Hospital. Barnes physician and Mallinckrodt all refused to share records with the employee. My mother assumes that the records were destroyed -- or I should say assumed. Dosimeter badge and records destroyed at Destrehan site after medical exam. She assumes this. She knows that they took all of her records away from her and took her dosimeter badge. And on August 15th, 1959 they transferred her to Weldon Springs. This is the same day they confiscated all of her records. A note about her job. Her desk had to be wiped clean from black dust that covered it daily. She didn't know what the black dust was. A few notes from her employment that she was able to keep. They didn't confiscate these. Black dust eats holes in nylons. Black dust eats holes in car paint. Miscarriage in 1957. This is after her employment. Twelve years until next pregnancy. Birthing problems. Son in hospital after birth, barely survived. Many birthing problems and sick offspring, similar to other of her coworkers.

I note on Federal government efficiency. Dose reconstruction has not started in January of 2005, yet we have a letter from NIOSH claiming it started August 14th, 2002. Two letters, conflicting dates. DOE claimed records were shredded due to contamination of facility, so the facility was closed and they couldn't verify employment because they shredded the records and destroyed the dosimeters. This was received April 2nd, 2003 from DOE.

I'll let you read what you will into that. That's what my mother had asked to be read to you on July 9th of 2003. It's now only a year and a half later and we have not progressed actually one second past July 9th of 2003, as far as I can tell from listening to the discussions today. Maybe we've spent a few more billion dollars. Thank you.

DR. ZIEMER: Thank you, Dr. Hendrick (sic), sharing that. I recognize your frustration. We have one individual who's one of the bus riders that would like to speak. Are you approaching the mike now? And please state your name for the record, please.

UNIDENTIFIED: First of all, I want to thank

you for giving me a chance to talk. I worked for Mallinckrodt --

DR. ZIEMER: Could you state your name, sir? Could you state your name for the record, please?

UNIDENTIFIED: Can I -- I'm sorry?

DR. ZIEMER: Give us your name, please.

MR. MUECKE: Edward, and the last name's spelled M-u-e-c-k-e.

DR. ZIEMER: Thank you.

MR. MUECKE: I worked for Mallinckrodt -- I started in 1947. Now I was asked today if I hate the company. Truthfully, no. I had no reason to hate the company for not telling me. As far as I was concerned, they -- they did hold things back. I didn't know what I was doing and I didn't mention what I was doing, to anyone. In those days you didn't do it because the Russians didn't have the bomb. But the building that I originally worked in, the sign on the outside, it said that the first uranium produced in the first atomic bomb was produced in this building. Well, I stayed in the radiation department from 1947 and I -- ten years later I -- well, I went from Plant 4 --

was knocked down and I went to Plant 5 that was built and was going to be one of those things where the air is going to be -- well, it -- at Plant 4 I should say it was deplorable. I mean it was the worst of all.

We had -- they gave you a respirator, but it was so heavy you would never wear it. And none of us wore it. We didn't know -- we were mixing what we called green salt and mixing it with magnesium. And when you put those into what they call a bomb shell, we had no -- in the Plant 4, we had nothing to pick up that dust, no ventilation at all, you know -- or vacuum, I should say, to pull it away.

Well, when they -- we moved from there down to Plant 6E, they tore that building down, that Plant 4. When they tore that down -- they wouldn't do it today, but they just knocked it down and they took all the bricks -- hauled them all away. Then they came in and took eight feet of -- approximately eight feet of dirt -- of bricks and all out, and they went down and they came in with fresh dirt and put dirt in there. They then came and asphalt that -- and if you go down there today, it's a

parking lot.
Now that Plant 6E that was so good, well, when I went down there -- it was, in the beginning it worked real good. And all this air that you were taking in from dust and all, they had big containers that -- bags, we called them, and what they had on the outside was air blowing in there. And what that air was doing, as it moved up and down, was knocking that material loose and it'd fall into these drums and they were hauled off to the airport. Well, I'd go along -- I was utility men (unintelligible) and we'd go along and I'd say to the foreman, I'd say that one section up there, I cannot -- well, it was collecting the dust. It had an electric eye in there and the electric -- anything breaks that beam shuts the thing down, so I go to the foreman on a Monday and I said, in particular -- I went to him and I said I can't keep that thing on automatic. The thing will not stay on automatic because it was being -- breaking that -- you mean to tell me we worked on Saturday time and a half, Sunday double time, and you come to me on a Monday and tell me that you want to shut that thing down?

Put that thing on manual and forget about it. Now the person outside here, he's breezing along thinking boy, I'll get a big breath of air. He takes a big breath of air, he's taking all of that (unintelligible) what we were putting out into the air. He didn't know it. That's when they moved that Plant 6E out to Weldon Springs. Well, I had too much seniority at that time to go to Weldon Springs, so I stayed there.

And the media asked me if I disliked them. No, I must have liked them a little bit because I spent 50 years with them.

I want to thank you for the time. Thank you.

DR. WADE: Thank you, sir. Next we have Mrs. Tyndale.

MS. TYNDALE: My name is Tina Tyndale. My husband's name is Franklin Tyndale. He was employed at ABB, the former Mallinckrodt plant, from February, 1992 through June of 2001 when the plant closed. He will be here tomorrow to talk about his position, the exposure and that type of thing. I'm just here to tell our story. It's very difficult for him to talk about.

He worked a lot of seven-day, 12-hour shifts. He also started body-building while employed there. He was in excellent health. For the body-building he consumed large amounts of water, mostly at work, since this is where he was most of the time. He never was told that the water was contaminated.

He also worked on the scanner where the rods had to be activated to check for proper enrichment. This area had the highest dose of radiation in the plant.

In July of 1998 he noticed a bump on his upper thigh. He went to the doctor and was told it was a hematoma from lifting weights and not to worry about it. He had it checked again in a couple of months and was told the same thing. I grew more and more concerned because it kept getting bigger. He went back in February of '99. This time he was sent to a surgeon, who did an MRI. The surgeon told us at that time he didn't think it was anything to worry about, but he could have it removed in a month or two if he wanted. The following week the surgeon called and said they'd changed their minds, they wanted to remove it immediately. I knew

in my heart that someone else had looked at that MRI and saw something the other doctor had not, and it wasn't good. This is when our nightmare started.

They did the surgery a few days later. While Jim was in recovery the doctor came out to talk to me. He wouldn't answer any of my questions. He only looked at me and said he needed to keep his patient's spirits up. I knew instantly that it was cancer. He didn't have to tell me; I knew from his behavior. I just didn't know at that time it would be one of the most rarest, most aggressive forms of cancer known to man. Most doctors will never ever see it in their entire career. That is why it was misdiagnosed for so long as a hematoma.

The doctor walked off and left me standing there with all these questions and no answers. I'll never forget that feeling. I was in a panic. I was scared and I was sick inside. I went outside and cried hysterically, finally realizing the doctor wasn't going to tell him anything until the biopsy came back the following week. I knew I had to go in his room and act as if everything were okay. As soon as

I entered the room, he knew that something was wrong. He could tell I'd been crying. When I looked up at him there was panic in his face and he kept saying what is it, what is it, you know something I don't. I had to lie and convince him that I was just tired and, you know, I -- I didn't know anything. Inside I was physically sick. All I could think about was him dying.

The whole week waiting for the biopsy was hell because I couldn't think about anything else. I just kept praying they were wrong, it must be anything but cancer.

When we walked into the office for the results of the biopsy, the doctor sat on a stool. He spun around and he had this horrible, sad look on his face. I could literally see the tears in his eyes. He couldn't even talk. It took him about two or three minutes, and all he could say was I am so sorry, you are so young. That came out of his mouth before telling him he had the cancer. And he just kept saying I am so sorry.

We sat there. We couldn't even speak. We couldn't do anything. It was just devastating.

He finally said it was ovular sarcoma*, a very rare, very aggressive form of cancer. There was no talk about helping him get through it. There was no talk about, you know, he was going to pull through it, we were going to take care of this, we were going to -- you know, there was none of that. He just kept saying I'm sorry. I mean he basically handed him a death sentence.

The whole visit is just a memory of pain, sadness, anger -- because I knew instantly that he got it out there at that plant where he worked. There was no doubt in my mind. There was no cancer in his family. He was too healthy.

The problem was, no one in this area even knew about sarcoma. We kept -- contacted all the major hospitals. The doctor tried to find a -- a cancer doctor, to no avail. There was no one here that could treat this cancer. So we had to start going to M. D. Anderson in Houston. We went down there on the first visit, and when the doctor walked in he sat down and he said we're shocked that you're here. We can't believe you're alive. I said what do you mean

by that? And he said sarcoma usually kills in four to six months undiagnosed. He had already had the knot for ten months. I was even scareder (sic) then. At that point I didn't know if he was going to live a few more days, a few more weeks.

They decided to do surgery again. We got to come back home for I think it was three days. He said he wanted him to come home and be with his family for a few days before the surgery. So we came back home. We went straight back down there. We were only home for a day, I think.

We got married that Sunday, in fact -- got married that Sunday, March 28th, '99. We left for Houston Monday morning. Our honeymoon was spent at M. D. Anderson Hospital with him recovering from the surgery.

They say that the surgery went well. They biopsied all the tissue that was left in his thigh. They took out his whole quadrant. He has a huge -- you know, there's no muscle or anything there, it's -- his leg is just all indented. He had to stop body-building. It's just been, you know, very devastating for us

financially, emotionally.
They made us come every three months for the checkups for the first two years. We had to go to Houston every three months. Depending on the copays and deductibles and the trip, sometimes those trips were about $4,500 each. I mean it just financially took everything he had.
After two years they put us on six months, and they told us that the fifth year we could change to a year. Before that even happened, they saw changes in the MRI so they put us back on three months. You know, it's just a constant. Every time we go there we never -- we never know if they're going to say it's metastasized.
This form of cancer metastasizes to the brain and to the lung. And when and if it does, there's very, very little chance of survival, and that's what we're faced with every day, because the cancer is so rare that there have been no long-term studies. So what they're telling us is their good guess. So we're looking at probably, after five years, 30 to 50 percent chance that it will metastasize.

So as I stand here right now, having to come here and even beg for, you know, compensation we shouldn't have to do, you know, I know in my heart that at any given time we could have to go to Houston and stay there for 12 months of chemo and radiation. We can't financially even do that without this money. It won't be possible. We would have to stay here, and that will be a death sentence for him, because they can't treat it here. It's extremely important for him to be compensated.

He is so afraid of this he will not take out a loan. We cannot get a house. We cannot get a car. We cannot do anything. We can't even use the credit cards because he knows that if anything happens to him, I'll be left holding all that and I can't do it. You know, these trips are -- are just outrageous for him. He stays so depressed for a whole week. The whole trip down there, the whole time we're there, he doesn't talk, he doesn't leave the hotel room to even eat, we order in. I mean he doesn't even speak he is in such a depression until he gets the word from the doctor that the cancer's not returned yet.

And that's what our lives have been like since he worked at that plant. It's just -- it's hard -- it's hard for me to comprehend why we all have to keep coming here and doing this and getting denied, because the excuses just aren't good enough for me anymore. The bottom line is you all know all the people who have died and are still dying today, and nobody's doing anything about it. That's just outrageous to me, you know. It's time for all these people to be compensated for the hell they've been through and their families. It's really time to stop all these excuses of there hasn't been a site profile and there has -- what more proof do you need than death everywhere? Thank you.

DR. ZIEMER: Thank you for sharing a very difficult tale.

Let me just sort of inform you all where we are at the moment. We have one bus rider who wishes to speak, and the gentleman -- okay, yes.

MR. VOGNER: My name is John Vogner. I worked for the uranium division downtown, and also at Weldon Springs. And I've been trying to get hold of my medical records and I've got all

kinds of runaround. I've called Paducah and Oak Ridge and everyplace else, and I had a time establishing the fact that I had worked for Mallinckrodt. I originally wrote to Mallinckrodt for my health record and also my employment record. And after bugging them back and forth and everything like that, I finally heard from a lady down there and she sent me a copy of my employment.

Now while at Mallinckrodt at the Destrehan plant on the river there, we had pitchblende coming in at that time from the Belgian Congo. And from what I understand, that was pretty hot stuff. I was in and out of tanks and stuff like that, working on level indicators and things on that order. And I worked all through the plant with Mr. Windisch that brought this up, and like I say -- I mean where are my records at? Was I hot enough they decided we'd better get rid of these things or what? And that's what I'm worried about. Am I supposed to drop dead so my wife has to go ahead and go through all of this stuff? Thank you.

DR. ZIEMER: Okay, thank you. We have approximately a dozen individuals left, half of

whom have asked for five minutes each, some have asked for ten minutes each, and some 15 minutes, which tells me we have well over an hour yet. What I would like to find out is whether any of those who have signed up plan to be here either tomorrow or the next day and would be willing to do their comments at one of the -- we have several other public comment periods coming up tomorrow and Wednesday. If there are those, I would suggest -- if they -- if they're willing to. We can certainly stay as long as we need to, but if there are some who would be willing to postpone their comments to one of the later sessions, that might help some who are not able to do that and who may need to leave.

Are there any who signed up that might be able to do their comments -- could you tell us your name?

MS. MAUSER: Terri Mauser.

DR. ZIEMER: Terri? Thank you. Any others?

DR. WADE: A lady over here.

DR. ZIEMER: Where?

DR. WADE: The lady right here.

UNIDENTIFIED: My name is Donna

(unintelligible) and (unintelligible) tomorrow.

DR. ZIEMER: Okay, Donna, thank you. Any others?

MR. SCHNEIDER: (Off microphone) I'm Clarence Schneider and I'll wait till tomorrow.

DR. ZIEMER: Thank you, Clarence.

MR. BOYD: (Off microphone) James Boyd.

DR. ZIEMER: James? Thank you.

UNIDENTIFIED: My name is (unintelligible) and (unintelligible).

DR. ZIEMER: That's fine. Any others that would want to postpone? Okay, fine. Let's proceed then. Let's see, actually the next -- you can go ahead, ma'am, and then I'll catch the others.

MS. CROCK: My name is Jamie Crock and my dad was employed by Mallinckrodt. He's been deceased for about seven years, but he was employed by Mallinckrodt at Destrehan and at Weldon Springs. Again, as everyone else has said, I would like to thank you for this opportunity to talk. My first question to you is have any of you been to Weldon Springs to see that site?

I don't understand how the government can spend

the millions and billions of dollars that they have spent --

DR. ZIEMER: That may be the phone (unintelligible), and sorry, we'll get this corrected here -- a voice from somewhere -- cyberspace. Sorry for the interruption.

MS. CROCK: That's okay. I don't understand how the government can spend billions of dollars to clean up a site and not help the people who worked there. These people invested a lot of time and energy to help the government be able to do what it needed to do, and the government has basically deserted them. We've been at this for probably five years, and all we keep doing is getting mail. We've spent enough money in mail between us and NIOSH and dose reconstruction and all of those people that you could have paid the $150,000 and saved yourself a lot of mail and time.

But anyway, he -- my dad had radiation-induced cataracts at the age of 40. He had skin cancer. He hauled uranium waste in his car. He would take us as children and show us where he delivered it to and put it in bunkers in Busch Wildlife area. And we still live with

this today because we have the house that he built when he was employed by Mallinckrodt, and he -- I'm sure he brought that home from work with him every day. He was a payroll specialist. He was in the plant. He would have to try to read time cards that were completely covered in dust. So like I said, basically it's just, to me, all of you people being here tonight in this big fancy room, we could be helping a whole lot of people.

DR. ZIEMER: Thank you. Shirley Cavaleski? Shirley? Is Shirley not -- not here, perhaps has left. Okay.

Frank O'Hare? Michael Amro? I'm having a little trouble reading this one. It's a short name, looks like an A-m-r-o, Anro? Okay.

Rosemary Zack? Thank you.

MS. ZACK: Yes, I worked for Mallinckrodt from 1957, April of 1957 through December of 1966. At that time -- I worked for document control when I first became an employee there for a number of years, and I do know that one time -- and I also filed in the technical library, and I do know that at one time I accompanied a guard out in the back of the plant and we did -

- there was an incinerator there and they did burn some -- as I was told, it was declassified documents. I don't know exactly what we burned, but I do know that we did that. And when I was in -- 1963 I did suffer a miscarriage while working there, and I've had three operations -- I've never had cancer, but I've had three operations and had non-malignant tumors removed. And I have at the present time a cyst on my spine and I also have a cyst on one of my kidneys. It's monitored by my doctors once a year by MRI. And I just wanted to bring that to your attention and I guess that's it.

DR. ZIEMER: Okay, thank you very much. Mary Jennon -- Jennon, is it? Is that close?

MS. JENERRY: Mary Jenerry.

DR. ZIEMER: Jenerry, okay. Thank you. I like the sound of that, Mary Jenerry.

MS. JENERRY: Yeah, and I worked in -- for Mallinckrodt in 1957 and '58 and in 2000 why, I had kidney cancer. I had to have my kidney removed. And while I was working at Mallinckrodt why, there were a lot of things that went on that I -- I didn't think anything

of until all this came about. I've seen like yellow dust in the cafeteria, and I've seen men come in with covers on their boots, but I -- I mean I thought we were completely safe. I loved Mallinckrodt.

The guards would go from one station to the other, so I don't know, maybe they were out in the plant. I'm sure they were. I have seen them bring -- one time they brought some frogs in and, you know, it was just being like funny, showing them to me and they were from one of the ponds out there, and they were so deformed that I even had to turn my head. It was horrible. And -- well, I guess that's about it.

I drank the water out there. I've seen the -- out at the pipes I've seen yellow smoke, but I didn't know what it was. I think the building -- probably the whole building probably had contamination in it, but I wasn't aware of that. I was young. I was totally trusting and I loved working for Mallinckrodt. But now every six months I have to go for a blood test to see if I -- my other kidney's working. So hopefully everything'll be okay. Thanks a lot

for your time.

DR. ZIEMER: Thank you, Mary. Germine Holtmeyer*.

MS. HOLTMEYER: ... and --

DR. ZIEMER: Gerine, I'm sorry, I got that wrong.

MS. HOLTMEYER: That's okay, everybody has problems with it. My husband's name was Robert Holtmeyer. He worked at Mallinckrodt at Weldon Springs in the '50's and early '60's, and he was diagnosed with cancer when he was 49 years old, colon cancer. And the doctor said that he had had it for years. He was a seemingly healthy man with parents and grandparents that lived into their eighties.

The day he came home from the doctor with a diagnosis of cancer, I collapsed and screamed, That damned Mallinckrodt Chemical, and he replied -- and I can still hear him -- I know, I know. It was a fear he lived with, mainly because he had lost many Mallinckrodt coworkers and carpool buddies by now, all due to cancer. He was able to walk one of his three daughters down the aisle, but never got to see his grandsons.

I was told that my husband's records were also destroyed, and I had to go through Social Security and everything to get records to prove that he worked there. My claim has been denied. However, I have appealed and I'm appealing to you right now, please help us. Thank you.

Oh, I'm sorry, my sister-in-law is with me, and her husband also worked there and she asked me to get up and say a few words for her. He was also my husband's buddy and in the carpool, so they had something in common. He worked there in the '50's. He was a maintenance man and whenever there was trouble somewhere, he was called to fix it. He had a boil on his leg -- and I saw a picture of it and it was so gross -- he had a boil on his leg and it would burst and burn, and his skin would turn yellow.

One time something was leaking at work and it exploded, and he had to climb up a ladder and pull another man out to save him. Hard telling what that was he was exposed to.

We had ten children. When he died I had five of them to raise by myself. He was 55 years old when he died. Thank you.

DR. ZIEMER: Thank you very much. That completes our public comment period. And again, I -- the -- one, two, three, four, five individuals who volunteered to postpone till tomorrow, we will have you on the schedule then first thing tomorrow.

Is there another comment?

MR. SEMARADI: I was on that list earlier.

DR. ZIEMER: Oh, okay. Maybe -- maybe we -- maybe you were out when we called your name.

MR. SEMARADI: Yeah, well, I -- Andy Semaradi. I came in earlier and you guys -- after your break there and before we --

DR. ZIEMER: Okay.

MR. SEMARADI: And while I'm on a -- while these people are on a roll here, I'd like to know -- I had NIOSH, OSHA, everybody out there at the airport. This is a different thing, but like the man said a while ago, he loaded the trucks that dumped at the airport. And I know for a fact that -- I've got test results, I've got samples -- this stuff was dumped out there and we've been -- now this man here come up -- he had a good presentation on what he was doing there. When you're having a hearing like this,

how long do these people have to wait? Shouldn't this company here have an answer for you when you have this here going on? I mean I've been fighting since 1996 trying to get information from the government on what it is. And according to my right to work hazard -- workplace hazards, access to your exposure records, 29 CFR -- these guys from the NIOSH will tell you -- these companies are supposed to keep your records 30 years after you leave employment. And instead of these guys waiting for you to pay them $150,000 or $250,000, can't you sue Mallinckrodt because they don't' have their records? It says in the rules here you're supposed to have the records. I mean isn't there a different way? I'm going to go after them on the waste water -- individuals can sue the government for discharges. Now I've had hazwopper* training. I know what I'm supposed to do and what I'm not. Now when they tell me to pick up contaminated, polluted radiation water and dump it into Coldwater Creek out there into Missouri and it goes into the river, I'm violating the rules and the laws if I do anything, but NIOSH, OSHA, DNR, nobody

wants to help these people, and it's about time -- you know, you people -- I think you've all got a good idea that you're wanting to help the people, but when you're having a hearing like this, when this man puts a presentation up and you're going to be voting on something, the other company doesn't have an answer, you know, how long do they have to wait? It's going on forever and it's about time to get something done.

DR. ZIEMER: Thank you.

MR. SEMARADI: And why can't they sue Mallinckrodt? And if anybody looks, we've had air sampling done at the airport. We've had it -- okay, what have you got, Washington University does it, somebody else does it, and what do you -- when you go down to Barnes Hospital, what do you see? A Mallinckrodt wing, a Monsanto wing, a MacDonald-Douglas wing, and these are the people that polluted, so they're giving millions of dollars to these research places and there's nobody going to do a thing about it because that's where their money comes from. It's about time you people started paying somebody.

DR. ZIEMER: Thank you. That will then conclude our session for today. Let me remind you that the Board will be in session all day tomorrow -- I'm looking for the agenda. I believe we start at 8:30 in the morning.

DR. WADE: 8:00.

DR. ZIEMER: Or 8:00 in the morning, providing all the equipment works well. There are some public comment sessions on the schedule tomorrow, so I hope many of you will be able to be here. Thank you very much. We're recessed till tomorrow.

(Whereupon, an adjournment was taken to Tuesday, Feb 8, 2005.)

C E R T I F I C A T E 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 February 7, 2005; 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 2nd day of March, 2005.

Steven Ray Green

STEVEN RAY GREEN, CCR

CERTIFIED MERIT COURT REP9 TE1k

CERTIFICATE NUMBER: A-21`2