UNITED STATES OF AMERICA CENTERS FOR DISEASE CONTROL

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

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ADVISORY BOARD ON RADIATION AND WORKER HEALTH

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81st MEETING

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WEDNESDAY
DECEMBER 7, 2011

The meeting convened at 8:15 a.m., Eastern Standard Time, in the Tampa Marriott Westshore, 1001 N. Westshore Blvd., Tampa, Florida, James M. Melius, Chairman, presiding.

PRESENT:

JAMES M. MELIUS, Chairman
HENRY ANDERSON, Member
JOSIE BEACH, Member
BRADLEY P. CLAWSON, Member
R. WILLIAM FIELD, Member
JAMES E. LOCKEY, Member
WANDA I. MUNN, Member
JOHN W. POSTON, SR., Member
DAVID B. RICHARDSON, Member
GENEVIEVE S. ROESSLER, Member
PHILLIP SCHOFIELD, Member
PAUL L. ZIEMER, Member
TED KATZ, Designated Federal Official

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LIN, JENNY, HHS

MAKHIJANI, ARJUN, SC&A

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MILLER, JOSH

NETON, JIM, DCAS

OSEFF, SEDELL

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ROLFES, MARK, DCAS

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*Participating via telephone

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P-R-O-C-E-E-D-I-N-G-S

8:33 a.m.

CHAIRMAN MELIUS: Welcome, everybody, to whatever this meeting, 81, the 81st meeting, okay, of this Advisory Board. We have a few Members that are delayed and will be in, I believe, later today. But the important ones are here, right? So welcome. Let me turn it over to Ted who will explain and get things started, some housekeeping issues.

Thank you, Jim. MR. KATZ: warm welcome, everyone in the room and on the Advisory Board on Radiation Worker line. I just extend my welcome as well from Health. Secretary Sebelius and from Dr. Howard, director of NIOSH. For folks on the phone the presentations that you'll hear today and tomorrow should all be on the NIOSH website under the Board section so you can follow along as people talk with the slides, if you go to the website. You can download those or

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view them online, whichever.

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We have a public comment session, we have one public comment session in this meeting since it's only a two-day meeting and that's this evening beginning at 5, from 5 to 6:30 or whenever it ends if it ends earlier. So try to come to the front end of that if you can.

Let me just ask, for folks on the when you're listening to this call except when you are addressing the group, for example during the public comment session or if you're a petitioner during your petition If your session, please mute your phone. phone doesn't have a mute button just press *6, that'll mute your phone, and press *6 again to take your phone off of mute. And please don't leave the call on hold at any point, but hang up and dial back in because putting the call on hold will destroy the audio for everyone else on the call.

Let me just for the record note

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1	Member attendance. We have all Members but
2	Dr. Anderson, Richardson, Field, Lemen and
3	Griffon, and they're all expected early this
4	afternoon.
5	And the last point, everyone in
6	speaking today, please speak close to the mics
7	so that they have good audio. Oh, Mike
8	Gibson. I left a Board Member out, Mike
9	Gibson is also absent. No, Mike Gibson is on
10	by phone.
11	CHAIRMAN MELIUS: That's why I was
12	
13	MR. KATZ: Sorry. Thank you.
14	Mike, can you are you on the line right
15	now? Is that correct? Mr. Gibson? You might
16	be on mute. Okay, well I don't hear him right
17	now.
18	CHAIRMAN MELIUS: We're expecting
19	him to join us at least later.
20	MR. KATZ: Right.
21	CHAIRMAN MELIUS: Okay. Thank
22	you, Ted, for that. As we, at least the Board

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Members and I think many of the people in the audience know after our last in-person Board Meeting out in the state of Washington one of our really key Board Members, someone who had been with the Board from the start, with many of us, unfortunately had become ill and died quite suddenly. It's a major loss for us, someone that we had worked with over many years and contributed so much to the work of the Board. So I thought we should take a few minutes here this morning to, out of respect, to honor Robert Presley for his work on the Board and for his long career working at the Department of Energy.

We worked, in the time period after Bob became ill, to honor him of his work and one of the things that we did obtain was letters from both Secretary Sebelius and from President Obama to him, so I'm going to ask Ted to read those letters.

MR. KATZ: Dear Mr. Presley, I'm very sorry to learn about your illness.

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You've been a prized Member of the Advisory Board of Radiation and Worker Health since its inception in 2001. Your broad expertise in nuclear weapons operations, your integrity in applying considered judgment to the decisions of the Board and your compassion have contributed greatly to the Board's outstanding record of service to the National Institute for Occupational Safety and Health's Reconstruction Program, to the Department of Health and Human Services and to the many thousands of nuclear weapons workers that we serve under the Energy Employees Occupational Illness Compensation Act.

Your many decades of service to this nation as a nuclear weapons worker at Y-12 equally deserve our honor. I, together with the director of NIOSH and many others in this department and at NIOSH, salute you and convey our appreciation and sympathy to you, your wife Louise and your family. Sincerely, Kathleen Sebelius.

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Dear Robert, I recently learned of the challenges you're facing and I want you to know how much I admire your strength. My thoughts are with you during this difficult time. Your hard work and dedication have helped protect the health and safety of the American people and I'm grateful for your commitment to our nation.

In the days ahead I hope you draw inspiration from the principles that guide you and find comfort in the support of friends and loved ones. Please know Michelle and I will keep you in our prayers. Sincerely, Barack Obama.

And these letters, they received these in Bob's last week among a flood of letters from all over the country from colleagues who had worked with him all over the weapons complex.

CHAIRMAN MELIUS: Thank you, Ted.

Also, I asked Paul Ziemer who knew Bob well if
he wanted to say few words also.

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MEMBER ZIEMER: My few words here today cannot begin to capture the impact of the life of a man such as Bob Presley, but perhaps it will help us to remember some of those things that made him a special person.

First, I do want to greet Louise Presley who I believe is still on the line, and Louise, we send you our love and want you to know that you continue to be in our thoughts and prayers.

The Advisory Board lost a valued Member and friend with the death of Robert Bob Winton Presley who passed away on September 21st, 2011, at his home after a brief illness with cancer. Bob was born in Cookeville, Tennessee. He was the son of Charles and Charlie Presley. In addition to his mother who survives, Bob is survived by his wife Louise of almost 47 years, Louise Stoddard Presley, by his daughter Brooke Presley Ownby and her husband Kevin, a granddaughter Kendall Morgan Ownby and a grandson due this month to

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Brooke and Kevin.

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Louise is known to most of our Board Members and accompanied Bob to many of our meetings. She was an avid photographer and really became the unofficial photographer for this Board, providing many of us with personal candid shots from Board Meetings as well as the Board portrait on our website.

Bob's parents moved from Algood, Tennessee, to the Oak Ridge area when Bob was just six weeks old so his father could work on the Manhattan Project at the K-25 plant. special note is that his family's first rental home in Oak Ridge was a two-bedroom flattop house located at 68 Outer Drive, and it's this very house that was recently donated by Dr. Kenneth and Isabelle Fitzpatrick-Smith to the American Museum of Science and Energy in Oak Ridge to be reconstructed on the museum grounds as a symbol of Oak Ridge's history during the Manhattan Project in time for the 60th anniversary of the museum and the gate-

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opening ceremony in March 2009. Bob loved to tell anyone who would listen that he and Abe Lincoln both had their childhood homes placed in museums.

Bob graduated from Oak Ridge High School in 1962, attended Tennessee Technical University and served as a tank driver and Army cook in the Tennessee Army National He went to work for Union Carbide Guard. nuclear division in the biology division initially as an animal handler and supervisor for Oak Ridge National Lab at Y-12. transferred to the Y-12 plant as a materials dispatcher and held successive jobs in the product engineering division while working on weapons production. He also worked with the Lawrence Livermore Lab, Los Alamos National Lab and Pantex facility in Texas as well as the Nevada Test Site.

In his later years of employment at Y-12 under DOE contractors Lockheed Martin and BWXT Y-12 he was involved as a protocol

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officer for tours at all of 0ak Ridge's government facilities for Tennessee's elected officials, U.S. military officials and U.S. cabinet members such as Secretaries of Energy. Bob retired from Y-12 in 2002 after 36 years of service and since retirement has held consulting jobs with Pro2Serve until 2008 and at the time of his death was employed by MS Technology, Incorporated.

Outside of work activities, became a community volunteer. He joined the Oak Ridge Jaycees and helped with the very first Special Olympics at Oak Ridge. involved also actively in the Tennessee Jaycees where he served as a District director, commander of the volunteer corps and on the Board of directors for Camp Discovery in Gainesboro. He was a Tennessee Jaycees international senator. Bob also became involved in the Anderson County Fair and the Association of Fairs Tennessee and positions in Tennessee and the East

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Tennessee Fair Group as director and vice president, and eventually became president of the Tennessee Association of Fairs in 1992.

Bob assisted In 1995, Lockheed Martin Energy Systems to help start a program called Help to the Smokies which is an employee volunteer project which he involved in rehabilitating picnic areas in the Great Smoky Mountains National Park, a project which is continuing today. Also since 2004, Bob and Louise volunteered many hours behalf of the Great Smoky Mountains Heritage Center in Townsend, Tennessee.

Bob's hobbies included spending time with family and friends, competitive barbecue cooking and judging, researching family genealogy, traveling and collecting antiques. He loved cooking barbecues for his church families at Covenant Presbyterian Church in Oak Ridge and the First United Methodist Church in Sevierville. And some of our Board Members will recall the barbecue

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that Bob hosted for us at one of our early meetings in Oak Ridge. He also enjoyed visiting and assessing restaurants at all of our locations where this Board met over the past decade. That ranged from Ted Drewe's Frozen Custard in St. Louis to Lawry's in Las Vegas.

of the original Bob one was appointees to the Advisory Board on Radiation and Worker Health and over the past 10 years has provided the Board with sound advice and informed observations based on his many years of experience in the DOE complex. We will miss his sage input on nuclear matters, his culinary recommendations on restaurant food selections and his genial companionship in all our activities. He was a man of integrity and faith. May his life, which was exemplified by love of family, love of country and service to others, be an inspiration to all of us. Peace to his memory.

CHAIRMAN MELIUS: Thank you, Paul.

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I just add what also struck me about Bob was his great empathy and care for the people that worked in the complex. For Bob he really was, really cared and really tried to work very hard on the work that we do in reviewing claims and petitions and so forth. But it was his great respect for the people that he worked with and care for them that always, always stood out for me. Can we have a brief moment of silence in honor of Bob?

(Whereupon, a moment of silence was observed in honor of Robert "Bob" Presley.)

CHAIRMAN MELIUS: Okay, thank you. And I'd also just like to recognize Ted and the NIOSH staff for their work during this difficult time and their work also to get the letters from the President and from the Secretary. There's certainly other people in the department that worked on that. It's not always easy given how busy things are in Washington and so forth. So I thank Ted for

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that and for the other work you did. And certainly I think we know we'll all miss Bob and all miss seeing him at these meetings. I can't recall him missing more than one or two meetings over that whole time period.

We'll go on with our program now.

Stu, you've got a tough act to follow here but

Stu Hinnefeld will give us an update on the

NIOSH program.

MR. HINNEFELD: Okay. I did pull my slide presentation up here but -- okay. I'll just restrict my comments to the program news portion of the presentation for the sake of brevity, and so if you have any questions about the statistics that are in the remainder of the package, and the presentation I think was provided to you, I'll be glad to try to questions about those answer any οf statistics.

The DCAS staff assignment information, I mentioned at our last meeting that our DCAS deputy director David Sundin had

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120-day detail assignment accepted а another organization in Cincinnati NIOSH. That 120 days ended at the end of October but it extended for another 120 days was so situation at DCAS continues the same and for the next 120 days, Dave will not be our deputy director as he's on this detail. And Chris Ellison will continue to serve as our acting deputy director again on a detail basis while Dave is working across the street. of you who may deal with Dave at times will now be more likely to deal with Chris on whatever issue you're dealing with.

I put the budget on here because there's a lot of interest in of course federal budget and what happens in the discussions. From our viewpoint in Cincinnati the only thing certain about the federal budget is uncertainty. So I can tell you that right now Health and Human Services is operating on a continuing resolution that lasts through December 16th. This has sort of been par for

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the course for the past few years as always start the year continuing on resolutions, this is actually the second one we've been on so far this fiscal year, and then at the eleventh hour something is done to move the bar down the road a little ways. That appears to be what will happen here. continuing resolution typically funds you at the previous year's level or some, you know, calculation based on that. This continuing resolution is funded at a very slight decrease from last year, it was like a 1.5 percent lower spending rate this year than what we were spending on last year's, the expectation for the continuing resolution. And so there are -- so it's not a particular impact.

Ι think There is concern, throughout the administration or throughout all branches of government that funding allocations for the year will not be as close 1.5 percent. may Ιt be greater as And so there's a certain amount of reduction.

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conservatism in terms of agencies wanting to go out and spend money. It's not particularly affected our program. There are all sorts of early warning systems about the budget process that give you a warning about the particular house of Congress or the administration has eyes on reducing your budget farther. None of those warning signs have flashed a warning for our program which doesn't do anything -- gives you a little bit of a good feeling but doesn't really tell you anything definitive. So right now things look fairly steady as far as we can read the tea leaves at this point.

There have been -- there is an impact when you fund a series of continuing resolutions it does impact your contractors to certain extent because you cannot, instance, award an entire year funding to a contractor if the contractor's contract is of You just don't have the any size at all. money in time to award the full year. So there is certain of monthly а amount

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incremental funding going on for the ORAU team which they are completely used to believe also this point for the SC&A at contract which is maybe a little bit of a new wrinkle for SC&A. So, but you know, as long as the continuing resolutions pass, we are funded. We fund contracts far enough in advance that we normally don't get into a bind of being out of money when it's time to fund the next month so we think we're going to be okay through this.

The chronic lymphocytic leukemia I put up there just because people might be interested in it. There is no particular news except that it continues to go through review Health and by Health and Human Services. Services published, if Human has you'll recall, a Notice of Proposed Rulemaking proposing to add chronic lymphocytic leukemia the as covered cancer, but rulemaking actually just eliminates the zero probability for CLL in the regulation. That is in the

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review process within the administration. The review process is hard to predict because there are all these review steps any one of which can loop back and cause an earlier worker to do additional work and so you kind of loop back through. So nothing proceeds, you can't count on proceeding directly through the review process and so you can't really predict the time on that.

And then finally this year for the third year in a row the Senate passed a resolution denoting October 30th as a day of remembrance for all nuclear weapons workers. series of remembrances There were а at number of DOE sites. NIOSH participated in one in Kansas City for the Kansas City plant cooperation with the machinists in And the Ombudsman Denise Brock was very key in arranging the details of that I participated along remembrance ceremony. with Denise and the DOL Ombudsman participated as well, Malcolm Nelson.

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1	And then I didn't put on the slide
2	but it occurs to me that at this point in
3	thinking back on the program and how we're
4	doing it kind of I don't want to be
5	complacent about this but it's kind of, things
6	are not looking very bad in the program right
7	now and from our standpoint, I don't know that
8	things ever look good but things really looked
9	bad a few years ago. And so not looking bad
10	to me is a pretty good place to be. If you'll
11	think about this, a number of years ago there
12	was a backlog of dose reconstruction claims at
13	NIOSH that was over 10,000, over 10,000 claims
14	in our inbox waiting to be done. That number
15	is now on the order of 800. We are completing
16	claims now, the vast majority of claims are
17	completed within nine months of when we
18	receive the claim, and a shorter time for when
19	we receive all the information necessary to do
20	the claim. So in terms of claimant and claim
21	timeliness, we're just in a far better
22	position than we have been throughout the life

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of the program.

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We do have a fair, a large amount of technical backlog work to do with the Board in terms of Evaluation Report consideration reviews Site Profile for SECs and and resolution of those comments. So our backlog is not yet done and we have a full plate of work to do for, certainly for some few years, some undefined few years it seems to me. so we do have work in front of us but it is different now, a different kind of work.

Along the lines of success stories and completing things, I did want to say I did look up some statistics for the Procedures Subcommittee. Ted reminded me I promised to say something about this. The Procedures Subcommittee has reviewed least. 95 at technical documents and I say at least because there were 95 reviewed that comments or findings of some sort. If there were any that were reviewed that did not have findings, then those procedures any

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documents would be additive onto the 95. Those
reviews resulted in something on the order of
540 540, can you hear me? Am I coming over
the mic? Five hundred and forty total
findings. Now, as we work through the
resolution of those findings though some 300
of those have been closed, are in a closed
status meaning the Board, the Work Group or
the Subcommittee has completed its work and
resolutions have been achieved. There are an
additional 25 that were similar enough to
other findings that the response to a
different finding essentially resolved the
second finding as well. So those are recorded
as addressed in another finding because the
response to the two findings essentially is
identical. And there are some 85 findings
that are what we call in abeyance in the
Procedures Subcommittee which means that we
have agreed on the resolution but one of our
documents needs to be revised in order to
incorporate that provision. And so that

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and the revision hasn't yet been issued. that's why those are held in abeyance. you add all those, and then there are some 50 that were transferred either to a site Work Group or considered an overarching issue and have to be dealt with in that fashion. Some of those overarching issues probably can still be dealt with by the Procedures Subcommittee understand it. So it Ι leaves as you somewhere less than 100 procedures out of that total of 540 that are either open, meaning the Subcommittee hasn't really discussed them yet or they're in progress which means they have been discussed but we are in the process of working out resolution to the findings.

The other part of this is that of the unreviewed documents t.hat. we have published very many of those are not technical documents, very many are administrative. documents believe the 95 that have reviewed represent really the great, majority of potential to be reviewed.

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1	documents get written as we go forward so
2	there maybe will always be some come up, but
3	the great majority of them seem to have been
4	written. Now, that tally of total documents,
5	that may there's another hundred or so
6	total documents. I don't think that includes
7	every chapter of every Site Profile. I think
8	the Site Profiles themselves are excluded from
9	that. So there are somewhere on the order of
10	a hundred documents we've identified that have
11	not been reviewed, many of which are
12	administrative. So, that's what I had to
13	report. I'd be glad to answer any questions
14	or I hope I didn't step on anything from
15	anybody else.
16	CHAIRMAN MELIUS: Thanks. Any
17	questions for Stu?
18	MR. HINNEFELD: Oh, I'm sorry. I
19	have one other personnel matter, the one I
20	wanted to say.
21	CHAIRMAN MELIUS: Okay.
22	MR. HINNEFELD: I wanted to

introduce Christina Batt. Christina is relatively with Office of new our Congressional Liaison, for lack of a better it, Office of term call Congressional And she is taking on the assignment Liaison. for our program that Jason Broehm had had. Most of you probably know Jason or remember He's still there, he's still working Jason. in that same office it's just that I guess he had done his time in purgatory and doesn't have to deal with our program anymore. And so that now falls to Christina.

(Laughter.)

MR. HINNEFELD: I'm not sure that they told her that was the assignment when she took it.

CHAIRMAN MELIUS: Short straw, right? Okay, any questions for Stu? Stu will be speaking later so if you want to have questions on all of the statistics and haven't had a chance to look them over, we'll get another chance at him. So thank you for that.

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A couple of housekeeping things. Has everybody, all the Board Members, gotten their opportunity to get all the information No, okay. And another personnel matter off? you reminded me, Stu. I recently ran into our former court reporter, longtime court reporter who was working on another NIOSH advisory board up in New York City so I got to visit with him his and he sent greetings everybody. Yes, Ray did that, said hello to everybody. Still remembers us. Nancy Adams was there with me also. She saw him too, we got the chance to visit.

Okay. Our next up I believe is

Jeff Kotsch from the Department of Labor.

MR. KOTSCH: Good morning. This will be the DOL announcement. Just a quick overview of the Act. This is more of an abbreviated set of slides this time so, but we'll get to that as we move through. The Act was enacted in October 2000, Part B was the mandatory federal entitlement by DOL and Part

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at that time was state workers comp which conducted assistance was the of Energy. The amendments in Department October 2004 abolished Part D and created the Part E program which was transferred to the Department of Labor and that's the toxic As of, and a couple of exposure portion. changing throughout these dates are slides, but as of November 8th, 148,340 cases and over \$7.5 billion of total compensation have been paid.

Obviously under the Act we have Department of Labor, Energy, Health and Human Services and Justice which works with the RECA portion. And the last slide is just, I mean the last portion is just we have the national office in D.C. of course but regional offices, district offices in Jacksonville, Cleveland, Denver and Seattle.

These are -- I'm sorry. Just a pie chart on the Part B cases filed and the percentages of each, just a couple of them, 36

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percent at NIOSH, SEC cases referred to NIOSH, percent; SEC sent because cases never basically we determined they fulfill the existing Class, 9 percent; 10 percent were RECA cases; the others, 36 percent include chronic beryllium disease, silicosis, things like that.

This slide is for essentially cases added by -- or yes, added for the SEC We're showing 3666 cases withdrawn from NIOSH for SEC Class review. Of those a little over 3,000 have become final decisions with 2919 final approvals by the Department of Labor. We have a process whereby cases out of the district offices have recommended decisions. They go to our Final Adjudication They are reviewed and then become Branch. final approvals. There's also appeal an process in there if wanted by the claimant. So have 36 recommended but no final, pending and 408 cases that were closed. So we have final decisions in 83 percent of the

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These are -- this slide is for the referral of case status. A little over 36,000 cases have been referred to NIOSH for dose reconstruction. A little under 34,000 have been returned and are currently at or were at DOL, which 29,713 had dose reconstructions and the remainder were pulled back or sent back without a dose reconstruction, and 2148 cases that are currently at NIOSH. It's a little bit higher than the NIOSH-reported numbers. We that disconnect between always have the reported values. We're indicating that 1524 initial referrals and 624 are re-works or Again, those are generally cases returns. that the Department of Labor has received additional cancer information or employment information, those are the two basic reasons.

This is the slide for the NIOSH dose reconstruction case status. Again, 29,713 cases have been returned by NIOSH that are currently at DOL with dose reconstruction.

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And there you see the other, the breakdown of
those, ultimately resulting in about 34
percent of final decisions of approval and the
remainder denials. And then this is just the
breakdown by cases, and again a reminder that
there's always fewer cases than claimants
because there could be more than one claimant
in a case in which case that would be the
payees. We've had accepted dose
reconstruction cases, 7987. These are for
11,000-almost 300 payees for \$1.18 billion in
compensation. Accepted SEC classes cases,
I'm sorry, 14,493 for \$2.15 billion in
compensation. The next is 523 cases accepted
for both SEC status and a PoC. That should be
greater than 50, that would be for payment for
medical benefits for cancers that are not
specified cancers. That's \$78 million and
adding up to a little over 23,000 cases for
\$3.4 billion in compensation. And then just a
bar chart for the indicating the 34,281
final decisions approved, the 23,880 cases

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denied and the breakdown off to the side, the primary being in this case almost 17,000 just with a PoC less than 50 percent.

Just the running slide of cases received by DOL. Still a steady influx around 400 a month in to Labor to begin with. Ι actually want to go back, or behind this to some of the other slides that are in the that probably should have been further. But you can read these too. those just relate to the definitions and the program, verifying employment. I just went to get to this, again, the running slide for Part B cases sent to NIOSH. It's running around the upper two hundreds, maybe the low three hundreds per month still. It seems to have been pretty steady. We're always curious whether that would, or how that was going to work out. Just there if you want to look too, there are the slides of the four top sites, Y-12, Oak Ridge, GDP, K-25 Hanford, And actually if you look Bethlehem Steel.

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through those you'll see that the Bethlehem Steel one is tailing off so that may, I don't know who the next one behind that is but it may come up eventually. And then the last couple of slides are just some of the local ones, either local as in the case of Pinellas or facilities that we were going to discuss during this meeting so we put up some of the statistics for those. For Pinellas we've had 1344 cases for Part B and D. And you see the Part B approvals, 121; Part E, 177 for \$26.9 million. And that's it.

CHAIRMAN MELIUS: Okay, thank you, Jeff. Questions for Jeff? We have a quiet Board this morning. I have a question or I guess a request because I'm not sure that you can answer this or should be able to answer this right off the top of your head, but it would be useful to know, have some idea of what outreach efforts are under way from DOL, just to get a sense of how you're reaching. And I don't think we've really had an update

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on that. We're aware from DOE's presentation of sort of the joint outreach that's going on and so forth, but I'd just be curious to hear at some point.

MR. KOTSCH: Yes, we can do that next time and keep that as a continuing part. I mean, obviously any time there's an SEC Class that becomes implemented there will be an outreach effort associated with that, just as right now we're planning for the Pantex one which will probably be in late, early or late February I guess. Or no, I think the Class becomes effective in middle to late February so our effort will actually probably be right after that. And I think we're doing the three of them right now and I always forget which ones those are. But yes, we can do that.

CHAIRMAN MELIUS: I just think it would be helpful. We haven't talked about it for a while, it would just be useful information for the Board to have when we're doing that.

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1 MR. KOTSCH: Sure. 2 CHAIRMAN MELIUS: Like I said, I 3 wasn't expecting an answer. MR. KOTSCH: We can do that. 4 Yes, good. Thank 5 CHAIRMAN MELIUS: 6 you. Other questions from the Board? Okay. Well Jeff will be around I believe for most of 7 the meeting we'll, if have 8 so we questions later. 9 Our next agenda item, 10 Department of Energy. Greg Lewis, welcome. 11 MR. LEWIS: Good morning, 12 I'm Greg Lewis and I'm the director everyone. 13 of Former Worker Compensation Support at the Department of Energy. I do want to talk about 14 a couple of the items that Stu had mentioned. 15 16 wanted to mention the National Day of also participated 17 Remembrance that we 18 supporting about a month ago. We attended a 19 few of the events and helped the group the 20 Cold War Patriots set up a few of their own events as well. 21 22 And then I also wanted to talk

continuing resolution. about the As Stu mentioned, the current continuing resolution expires on December 16th and I think that the percentage we've been allowed to spend somewhere around 15 percent right now or and change at least for the Department of Energy and that's based on our last year's So as far as where that spending amount. leaves our program we had some carryover from last year and given the amount we were allowed to allocate out to our field sites and the they're allowed to percentage that we've been able to operate at full capacity all of our field sites.

I will say the difficulty with a CR becomes more apparent the longer the CR continues because especially with a program like this where, you know, as SECs come in and come out and as outreach takes place there are more and less applicants at one site versus another. It becomes harder to transition funds around to these different sites because

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with the percentage, especially you know, the lower the percentage is so now at 15 percent if an SEC went into effect say at Pantex and we needed to send some more funds there, to get them \$15 we'd have to send them \$100 and they'd only be allowed to spend \$15. And as you can imagine that puts us at our budget very quickly. So currently, given carryover and given the percentage as I said we've been able to operate at full capacity but as the CR goes on potentially into January or February if it were to do so occasionally in the past in those situations we've run into funding shortfalls temporary at one site another and we do our best to versus move around. So that's of the money sort situation.

So our core mandate at the Department of Energy is to work on behalf of program claimants to ensure that all available worker and facility records and data are provided to DOL, NIOSH and the Advisory Board.

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three main responsibilities. We for requests individual claim respond to information, we respond and provide assistance large-scale records DOL and NIOSH for projects like research Special Exposure Cohorts the Department of Labor Site or Exposure Matrix, and we conduct research along with NIOSH and DOL into facility coverage.

The backbone of our program at DOE are the site point of contacts that we have out at all of our, you know we have 10 major offices 30 sites operations in over participate in this program. So we have one individual out at each of these sites who coordinates and manages the EEOICPA program and our records response out at those sites. They, as I said manage how we gather records we coordinate with the different departments, medical, radiological, incident, accident, things like that, to make sure that the right records are being gathered for all of the individuals and we're providing them in

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a timely manner. And they also, again, coordinate these large-scale records research efforts you know with NIOSH and SC&A team leads on the various sites.

about, We do as you see some numbers here, I'll go to the next slide, we do about 18,000 records requests a year. always make sure to add our numbers are not necessarily going to match Department Labor's and NIOSH's because those claims per year, those are requests. So if an individual worked at multiple sites, if they worked at three different sites we would count that as three different requests because we gather records had to on three separate occasions.

And our responses are very detailed. They're not just a few pages, they're not always in one location. As I alluded to earlier we go to multiple different departments at the active sites, medical, radiological, human resources. A request for

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one individual, we can provide hundreds of pages, many hundreds of pages in some cases if an individual had a long career or worked at, you know, multiple different areas or had multiple job titles.

have One site Ι there as an example routinely checks about 40 different sources for responsive records. That comes into play particularly at sites that have had multiple prime contractors over the years. They may have each brought in their own admin systems or databases to manage records. might have to go to microfilm, microfiche, hard copy records, federal record centers or different document management programs. And again with the large-scale records research projects that's kind of our second major task under EEOICPA. We are at the mercy of Department of Labor and NIOSH typically. guys need the information to do your jobs and we do our best to provide you what you need in These projects timely manner. can

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extensive, they can take many years and many, many site visits. We're often supporting multiple projects at once.

listed a few of the projects that are going on right now. These aren't certainly all of the large-scale projects but these are just a few of them that we've been supporting in the last few months. And of course, you know, in the Florida area, Pinellas, we haven't been supporting too much data-capture I believe. It seems like most of that has already taken place but we attempting to facilitate some interviews and we had some delays there but we're still attempting to do that and are hoping to set up these interviews within the next few months.

Document reviews. We do review final reports at DOE headquarters before they go public just to make sure there are no, you know, data sensitivity classification concerns, official use only. And we have a security plan, I've provided the link there,

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which kind of details how we do these reviews, what's reviewed in addition to some of our other protocols for how to get on-site and clearances, things like that. So that's a useful tool. We're actually in the process of updating that now. We don't believe we're going to be making any, you know, large-scale It's mostly just to, you know, changes. update since the last, I think it was 2008 that the original security plan came we're just kind of updating the links, making right have the manuals, reference material on there. We may add some additional information based on some things we've run into in the last two years but we don't anticipate it being a major overhaul or anything.

Since the last Advisory Board Meeting, NIOSH has submitted, or NIOSH and the Advisory Board and SC&A have submitted a total of 60 documents. The average turnaround time is about eight working days, but we've done it

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Т think I talked a little bit about SEC support but our sites participated in Board Working Group and conference calls. We hold routine conference calls and meetings with DOL and SC&A to make sure that we're meeting their needs and they're getting the information they need both from DOE sites. headquarters and from the DOE And we've tried to facilitate secure meetings in, you know, areas where classified discussions can take place if necessary. And then the third main responsibility that DOE has under the law is to research the facilities, facility coverage issues. And we're, know, that's ongoing. We're always looking into a few sites, making sure that the years are correct, the facility descriptions are I know recently we've been working correct. on Monsanto site and I know there's going to be a slight change coming out there. kind of off the top of my head but there's

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always a few of those.

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Our Office of Legacy Management supports our facility research. They are the group that handles the records for closure sites so they have a broad-based knowledge of the DOE complex, the operations and what went on at DOE sites. They also understand how records are managed and the various systems we use in DOE. So they're a tremendous resource both for facility coverage issues as well as, you know, the SEC and other large-scale site research projects.

We're always looking for additional records collections to be indexed and bring them into the collections that we search and, you know, use to respond to DOL and NIOSH. You know, when we determine that there's a collection that may not be indexed appropriately or that we have not been using to respond to EEOICPA claims and we feel like we maybe should, we will get together with that particular site evaluate the to

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collection, determine if indeed it is useful for EEOICPA and if in the format it's in, it's, you know, we're able to use it. If not we will go through and index. We might scan and digitize the records, make them electronic. We might just index so we can find them easier. But you know, when we do that we'll go front to back through collection, make sure it's in a format we can use and then we'll coordinate with DOL and NIOSH to go back through, you know, any past claim that might be affected. So obviously if we do find a new resource we don't want it just to be used for claims going forward, we want to make sure that all claimants get the benefit of that resource so we coordinate with DOL and NIOSH to make sure that happens.

And we've also been reviewing the Department of Labor's Site Exposure Matrix Database. We conducted the original review in 2008. Initially the database had been gathered out at DOE sites and DOE records by

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the Department of Labor and they had had it
behind their firewall accessible only to their
claims examiners but in 2008 they approached
us about reviewing this database so they could
put it out into a public forum. We did that
in 2008 and I believe it was either, I think
it was maybe early 2009 that it was actually
released. I can't remember offhand. But
we've also been conducting periodic reviews as
the Department of Labor gathers new
information or they also have a link on their
website where members of the public or worker
advocates can submit information. As that
information is submitted or gathered by DOL,
periodically we'll review it so that can
become part of the public SEM. We've done two
reviews so far and the third started in
October and I think we're looking to get that
back to Department of Labor I think in
January.

And then outreach, I know you had asked about outreach and I know that speaks to

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some of the things that DOL does on their own. There are many but also there's the Joint Outreach Task Group that we, NIOSH, Department of Labor, DOE and also the DOE Former Worker Medical Screening Programs coordinate to do some joint outreach. They're all essentially trying to reach the same, or more or less the same former worker population. So in the interest of combining resources and making the process more efficient we created a joint outreach group that will go out and hold some town hall meetings and you know, be able to provide individuals for each of those programs to talk to workers. So it's sort of a onestop shop for worker information.

I think currently we're planning on in the new year I think we had looked into going to the California Bay Area to conduct some outreach for Livermore, Berkeley, GE Vallecitos, Stanford Linear Accelerator Center. There's a number of sites, we felt like we've got good value in going out there

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because there was at least four to five different sites that we'll be able to mail and, you know, let folks know we're coming out there. And then we're also planning I believe to go to the Ohio area and potentially hold two to three meetings in different locations not necessarily -- I know we've been to the Cincinnati area and the Portsmouth area for the major sites but I think we're looking into Dayton where there's Mound and there's a few other AWEs and then also some areas where of there's more an AWE concentration potentially, in northern Ohio. So that's, you know, again those are -- we haven't finalized dates and exact locations for those but just to give you an idea of where we're looking at going this coming year.

And then I mentioned the Former Worker Medical Screening Program. The mission of the former worker screening program is to identify and notify former workers at risk for occupational disease and offer them medical

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screening that can lead to treatment.	So,
what it is, it's a free medical screen	ing
program for any former worker at	the
Department of Energy, any of our sites,	any
worker and no matter where you live now we	can
provide you with a free screening. So, I have	ave
a link there to more information on the form	mer
worker program. And then here is conta	act
information. There's two different form	mer
worker programs for workers in the area	of
Pinellas. It would be for production worker	rs.
It would be with Drs. Cragle, McInerney	and
Newman, and for construction workers, K	nut
Ringen is the principal investigator	and
there's contact information there. So I wo	uld
encourage any former workers here, any of	you
that might know former workers to encour	age
them to look into this program. It's	a
tremendous resource, it's free and we try	to
identify things early and facility	ate
successful treatment. So I think that's	it.
Does anyone have any questions?	

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CHAIRMAN MELIUS: I could have guessed that. Go ahead, Brad. Thank you, Greg, by the way.

I'd like to thank MEMBER CLAWSON: you especially for the Hanford and the Sandia, that was, it was very good. And especially when we were at Sandia we found out that we had some of the Pinellas people that had moved up there and were actually available and they brought them in for getting [Identifying information redacted to come onto the site in such short order when we found this out. was I know just a matter of hours and you were able to do that. We'd like to thank you for that.

As the security, as your security plan changes though you will keep us informed of any other changes so that we make sure that our security plan matches what yours do. I'd appreciate that.

MR. LEWIS: Absolutely and you'll be informed before it goes final. We're still

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in the early stages of doing that. We've brought in -- our new security advisor is aware of it. That's one of the things he's going to be taking a look into, so. But we'll make sure to keep you --

MEMBER CLAWSON: Another question that I have is do you supply DOE -- or DOL with the dates for the facilities, the covered periods? Are you the one that -- is DOE the one that supplies that to DOL?

MR. LEWIS: The way that it works is DOE determines whether or not a facility is covered for AWEs and DOL determines coverage for Department of Energy facilities, and then Department of Labor determines the years for both. So DOE decides whether an AWE is covered or not and then Department of Labor has the final say on the specific years, although, you know, we work closely with DOL on the research.

MEMBER CLAWSON: Okay. The reason

I bring this up is especially some of the

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older facilities, Pinellas, I mean not Pinellas, but Medina and Clarksville, and some of the records that we recovered at Sandia showed earlier work at Medina than what is the covered years and we just, I guess I was wondering which way would we need to have people to be able to look at this because Clarksville is the right years and Medina was exactly the same but there's like a ten-year difference of coverage.

MR. LEWIS: I mean in terms of who to provide it to I think you could provide it to either us or Department of Labor or even NIOSH, honestly. You know, any of the groups that receives it will, you know, coordinate with the others. We all work together to make sure that the right years are on there. I think the final say officially is with the Department of Labor so you could provide it to them but if you provide it to us or NIOSH it'll all get to the same place.

CHAIRMAN MELIUS: Brad, I think we

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1	should go through NIOSH since we advise NIOSH
2	and do it that way. Yes, that's how we've
3	done it before.
4	MEMBER CLAWSON: Okay, then that
5	was my main concern of the differences that we
6	have run across so thank you.
7	CHAIRMAN MELIUS: While we're on
8	that clarification, who handles then the
9	residual period issues? That gets even a
10	little bit more different.
11	MR. HINNEFELD: The residual
12	periods are defined by our Residual
13	Contamination Report.
14	CHAIRMAN MELIUS: Right.
15	MR. HINNEFELD: So the residual
16	period questions are for us.
17	CHAIRMAN MELIUS: Yes. Okay.
18	Thank you. Other questions? Our meeting,
19	we're actually meeting in the Bay Area in
20	you want to do the dates?
21	MR. KATZ: February 28th until
22	March 1st.

CHAIRMAN MELIUS: Okay, the end of February. Ted and I were emailing back, we're trying to decide where to meet, given all the different facilities and so forth down there. I think we ended up in Oakland, is that --were you trying to use claim data or is that not working out?

We had tried to KATZ: claim data. There's more claims for the Berkeley location than there is for Lawrence So we're aiming for the Oakland Livermore. area but we're having a lot of trouble with hotels so it's not settled as to where we'll -- we may have to just go where we can get a place, between San Jose and Oakland. We spoke about San Jose, we may end up there anyway because of hotel difficulties. No, well it's trying to decide where people are likely to come to the meetings. It's not into that. And we probably should also coordinate with DOL in terms of if the outreach should be done at the same time or beforehand. It's a little --

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1 MR. LEWIS: It does make sense. 2 We'd be glad to work with. 3 Yes, yes, good, CHAIRMAN MELIUS: let's do that. 4 5 The problem is that MEMBER MUNN: 6 people often aren't where the hotel is. 7 CHAIRMAN MELIUS: Yes, I know, I It's hard, a big area and there's 8 know. traffic and things like that out there. 9 10 other questions for Greg? If not then, okay, 11 thank you. Appreciate it. Board Members, we 12 have а 13 schedule this time partly because some of our Board Members we knew would be delayed coming 14 We sort of backed off certain issues 15 16 till this afternoon, tomorrow morning. Also, we were trying to schedule times when the 17 18 petitioners could come on. So, we have a 19 number of issues go through this we can 20 morning. I wanted to do the ten year discussion when as many Board Members were 21

here as possible so we delayed that till this

afternoon and we should, and obviously for the active petitions we need to keep those on as scheduled as much as possible so that, because that's when the petitioners are expecting us to be discussing them. So we have a fairly long work session this morning which usually is longer at the end. And we don't have everybody here so we're going to be jumping around a little bit.

I'll give you warning, LaVon, I think right after the break I would suggest that we have LaVon give his presentation which I don't believe is very long. And -- but also that will give us some more time at the end if we're still wrestling with some of the SEC evaluations. It's hard to predict at this point in time.

The other thing I draw to everybody's attention, there aren't a lot of comments there but from the, what is it, the May meeting we have the public comments we should go through. Ted sent those out some

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time ago to everybody and along with the transcripts and so forth, but there's a spreadsheet that looked to me about two pages, I think. So we'll try to go through those maybe after the break also. I just want to make sure everybody has access to it. If not we can delay that. It wouldn't take long, but if we can get that done it would probably be a good idea.

What I thought we would do, start with is Work Group updates. There are at least some of them we can get through before the -- aren't on the schedule and that we do have at least the chairs here. We'll do that. And you're in luck again, Josie: Brookhaven.

MEMBER BEACH: There's not anything more for me to report on Brookhaven other than what I've reported the last couple of meetings. We're waiting for NIOSH's work and for NIOSH to report to us on Brookhaven at this point.

CHAIRMAN MELIUS: So remind us.

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1 MR. RUTHERFORD: Can you hear me? 2 CHAIRMAN MELIUS: Yes. 3 **RUTHERFORD:** Okay. I think MR. that once -- well, once I do my presentation 4 5 in a little bit --6 CHAIRMAN MELIUS: Well --7 MR. RUTHERFORD: but moving forward with an 83.14 that will adjust 8 and take care of some of the issues and I'll 9 10 talk a little bit about that shortly. 11 CHAIRMAN MELIUS: Okay. He was 12 going to surprise us at the end. That was --13 do that. Fernald, we have an update later on in the meeting so I think that's, we will wait 14 Hanford, I think we're waiting, 15 till that. 16 someone said an SC&A report. Arjun, are you still back there? And I think we need to 17 schedule a Work Group meeting fairly shortly. 18 19 DR. MAKHIJANI: We have reviewed 20 the revised Site Profile, you know, from an SEC point of view and had a number of findings 21 so we could schedule a Work Group meeting that 22

1 has -- that report has been with NIOSH for a 2 couple of months. 3 CHAIRMAN MELIUS: Okay. DR. MAKHIJANI: And there's the US 4 5 Testing SEC petition, 00155. I have a draft 6 review from Joyce Lipsztein in my computer. I 7 hope that we'll be sending that to DOE for review and then sending it out to the Work 8 Group. Ιt will be very straightforward, 9 10 there's not a lot there. So I think the main issues are going to be in the first 57, SEC 11 57, but our work should be complete by early 12 13 January. Most, 95 percent of it is done. CHAIRMAN MELIUS: Okay, so do we 14 15 think Joyce's report will be to the Board, to 16 the Work Group and to NIOSH say mid-January? I mean, I'm just trying to forget out when to 17 schedule --18 19 DR. MAKHIJANI: Yes. 20 CHAIRMAN MELIUS: Okay. So we'll plan on a Work Group meeting mid- to late, 21 22 probably late January.

1	DR. MAKHIJANI: Yes, late January
2	or early February would probably be safer.
3	CHAIRMAN MELIUS: Yes. The great
4	blizzard of whatever.
5	(Laughter.)
6	CHAIRMAN MELIUS: Okay, thanks.
7	Thanks, Arjun. Idaho?
8	MEMBER SCHOFIELD: Nothing more
9	than what we had the last meeting. They're
10	working on it.
11	CHAIRMAN MELIUS: Yes. Good. Ted,
12	did we get this time an update from reports
13	and so forth? We normally did I miss it
14	or?
15	MR. KATZ: We got an update on
16	status of work.
17	CHAIRMAN MELIUS: Yes.
18	MR. KATZ: We did.
19	CHAIRMAN MELIUS: Okay.
20	MR. KATZ: Yes, the coordination
21	
Į.	document it's called. DCAS coordination

1 CHAIRMAN MELIUS: Okay. They have not -- they didn't print that out, that's why 2 3 I was asking. Okay, waiting on that. Lawrence 4 Berkeley. Paul. 5 We have not met MEMBER ZIEMER: 6 yet. 7 CHAIRMAN MELIUS: Okay. Are you 8 planning to meet or what's the --Well, 9 MEMBER ZIEMER: we don't 10 have any immediate plans. We've been, this is sort of a priority thing. 11 CHAIRMAN MELIUS: It's a site --12 13 yes, I know that. MEMBER ZIEMER: What's available 14 15 for us to review in terms of there is an SC&A 16 document and I don't believe we have the responses to that yet from NIOSH. 17 So there have been other sites and so on that have 18 19 taken precedence for the larger Board that 20 have precluded us focusing on that Obviously, it's going to come on the screen 21 22 fairly soon, I would think. And possibly we

1 could have an initial meeting while we meet 2 out there to sort of scope things out but 3 we're not there yet. 4 CHAIRMAN MELIUS: Okay. 5 So I just think we need MR. KATZ: 6 to check with DCAS as to whether they have it 7 within their scopes to look at the review, thinking about the California meeting. 8 I will have to HINNEFELD: 9 MR. 10 find out. 11 MR. KATZ: Okay. 12 CHAIRMAN MELIUS: Okay. 13 Alamos, we need to come back when Mark is here. Mound? 14 15 MEMBER BEACH: Yes. Mound met in 16 November and I do have a brief report. status of Mound's SEC issues to date are as 17 We combined eight issues. 18 19 were all considered internal dose issues that 20 revolve around the lack of bioassays and the ability of NIOSH to dose-reconstruct using 21 22 source term information. NIOSH has issued a

detailed White Paper in response to SC&A's detailed Mound Internal Dosimetry Data Adequacy and Completeness paper that was out in June. At this time SC&A is currently reviewing NIOSH's paper. But discussions at our recent Work Group meeting, we felt that there was a clear path for resolution.

second issue is the The issue for which an SEC was granted by the Board last year. However, there are a couple of concerns with the existing Class Definition that the Work Group is addressing and should be able to make full recommendations to the Board during our February meeting. The last SEC issue that we're working with is issue 6, tritides. This issue remains open with a couple of key issues. First is regarding the feasibility of using tritium swipe data for dose reconstruction purposes.

In terms of support, workers in the period of 1980-forward including the D&D phase. Another key aspect of that review is

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whether those workers with the exposure potential can be identified. The Work Group has scheduled a secure meeting in Germantown for January 6th to move this issue to closure.

The other two issues that we were able to close during our November meeting was issue 10 which is the D&D period of 1995 to 2006. reported that NIOSH 90 percent compliance rate for former D&D workers for providing termination bioassays, which quite high. The Work Group recommended that NIOSH perform some follow-up analysis on 100 randomly selected last-entry radiation work permits and RWPs. This was completed and it did help to validate the RWP compliance rate and it was at a fairly high rate of 85 The Work Group felt that was in good percent. standing so we closed that issue.

Issues 14 and 15 dealt with neutron dose and the Work Group had three action items, one concerning MCMP specifically comparing the two MCMP analyses to the NTA

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track fading values, and the third was NTA data for 1951 to 1960. SC&A and the Work Group agreed with NIOSH's response on all three issues so we closed that item.

Mound issues The matrix was updated on November 3rd, 2011. Ιt is available for more in-depth review of each of the issues discussed with reference to the White Papers produced. I do plan on bringing this before the Board in February hopefully to last close out those three SEC that Ι mentioned earlier.

CHAIRMAN MELIUS: Yes, I think that would, I think we should plan. And even if the Work Group is uncertain about your recommendation I think it would probably be good to have some Board discussion of that at So let's plan and do that that meeting. because that's, it's been a while. We should at least try to see where we can go with that. Any questions for Josie? Okay. Pantex. because we do something at the last meeting

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1 doesn't mean you're off the hook, 2 There's more to do. 3 MEMBER CLAWSON: Yes, there is. 4 Actually, after we passed the SEC for Pantex I guess we're still, have we officially got the 5 6 letter sent in? 7 CHAIRMAN MELIUS: Yes. MEMBER CLAWSON: Okay. One of the 8 things that had been came out and I heard it 9 10 today was that Pantex was needing some kind of worker outreach so I was glad to hear that 11 12 that's been going on. We still have some Site 13 Profile issues that we're still dealing with, with Pantex and we'll just continue on. 14 15 CHAIRMAN MELIUS: I thought there was an issue of the additional years also. 16 Well, 17 MEMBER CLAWSON: that is 18 correct. We, at the Work Group meeting, to be 19 able to proceed with the SEC forward, we had the later years up till 1990 from 1985 and 20 some previous years. We're still looking into 21

that and researching that. We're waiting for

1	NIOSH to give us their evaluation for the 85
2	to 90 time frame. And we've done some data
3	recovery for the earlier years and SC&A's got
4	that.
5	CHAIRMAN MELIUS: Okay. Do we
6	know, did NIOSH have a schedule for when they
7	I'm just trying to push on this one a
8	little bit. We've been talking about it
9	recently and rather than having to go back and
10	sort of re-familiarize ourselves with it I
11	think it helps to if we can move it along.
12	It may not be possible. Okay.
13	MEMBER CLAWSON: It is going on.
14	CHAIRMAN MELIUS: Okay, good,
15	good. No, I just think we put a lot of effort
16	into it and the Board has a fair amount of
17	familiarity now with Pantex and if we can we
18	should. Okay.
19	MR. KATZ: For the court reporter,
20	your mic was off. What Stu said is that it is
21	on the schedule and he'll look into this.

CHAIRMAN MELIUS: Pinellas we'll

1	hear later this afternoon. Portsmouth,
2	Paducah, K-25? Do you have a catchy name we
3	can do for that? PDP, okay, yes, that's
4	better.
5	MEMBER SCHOFIELD: We actually met
6	and we have managed to reduce three different
7	matrices, basically, to one.
8	CHAIRMAN MELIUS: Okay.
9	MEMBER SCHOFIELD: So we've made a
10	lot of progress there.
11	CHAIRMAN MELIUS: Okay, good. This
12	is really mostly, it's a Site Profile.
13	MEMBER SCHOFIELD: Yes.
14	CHAIRMAN MELIUS: Yes, update,
15	because these, we're legislatively. Rocky
16	Flats group I believe had met, had a
17	conference call. We'll wait for Mark. Sandia,
18	I don't know if they did they meet?
19	MEMBER BEACH: I can report on
20	Sandia.
21	CHAIRMAN MELIUS: Okay.
22	MEMBER BEACH: So the Work Group

1	has not met but a couple of us went down to
2	Sandia for a site visit and interviews in
3	November, and that was very successful.
4	CHAIRMAN MELIUS: Okay, good. It's
5	all relatively new so it's going to take a
6	while.
7	MR. KATZ: Right, and the Work
8	Group is following up in Germantown, too, on
9	Sandia as well aren't we? Or is that just
10	Medina?
11	CHAIRMAN MELIUS: Medina-
12	Clarksville.
13	MR. KATZ: Okay.
14	CHAIRMAN MELIUS: I don't know if
15	Mike's on the phone for Santa Susana, I'm not
16	even sure there was any action.
17	MEMBER BEACH: Nothing.
18	CHAIRMAN MELIUS: Nothing? Okay.
19	Savannah River we'll hear about science
20	issues. I believe the group met and we'll
21	wait for David is coming, right? Yes. So
22	we'll hear from that. SEC issues, nothing

pending there. Dose Reconstruction

Subcommittee, we'll wait for Mark. Our

favorite Committee, Subcommittee, excuse me.

This is our favorite committee.

MEMBER MUNN: I'm glad. It's my favorite, too. It keeps me off the streets and that's very good for my community.

thank Stu for want to overview during his presentation. I wasn't expecting that and was very glad to hear it myself because one of the problems that we've had with our new database is that it does not easily give us that overall kind of information, so thanks to Ted and to Stu for making sure that that information came along. It was much appreciated.

We have not met and there's nothing new to report since the information that was provided at our last teleconference meeting. We do continue to plan our meeting in Cincinnati on January the 9th at which time we will take up the action items that will be

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CHAIRMAN MELIUS: Okay. Any questions for Wanda? TBD-6000.

The focus of TBD-MEMBER ZIEMER: 6000 this past summer and fall has been on General Steel Industries. Our last meeting was in November: November 2nd. We actually thought that we perhaps might have a specific recommendation for this meeting dealing with the early years at General Steel which would have been the period of 1953 to '62 since the radiological practices appear to be different in those early years compared to the there onward. However, was some new information we were dealing with at November meeting so the Work Group, turns out, is not prepared to give a specific recommendation to recommend an SEC at this time. However, that option is of course still We do have several White Papers that are still due from NIOSH. They're scheduled for delivery December 31st or thereabouts.

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1	say thereabouts because that's a holiday week
2	of course but in any event there are several
3	more White Papers that are coming due. They
4	were scheduled to be reviewed by the Work
5	Group as well as by SC&A and we have another
6	meeting scheduled for March to deal again with
7	the GS issues. So we are hopeful that we will
8	be in a position to make some more specific
9	recommendations at the next full Board
10	Meeting.
11	CHAIRMAN MELIUS: Any questions
12	for Paul? Thank you. Thank you, Paul, on
13	that. And I guess the other, again I don't
14	know if Mike's on the line. We have the
15	Worker Outreach.
16	MEMBER BEACH: I can give a quick
17	overview.
18	CHAIRMAN MELIUS: Okay, yes.
19	MEMBER BEACH: It's not much
20	different than what Ted reported on our
21	October meeting. The Worker Outreach Sampling
22	Plan was approved by the Work Group so SC&A is

1	moving forward with that evaluation. And I
2	think Joe was going to have to push it back a
3	month. Joe, when do we expect that? At the
4	end of December or is it early next year?
5	MR. KATZ: I think, Josie, it's
6	more around a March time frame, isn't that
7	right, Joe?
8	MEMBER BEACH: Oh, is it? Sorry.
9	Okay, so
10	MR. KATZ: Is that correct? March
11	approximately?
12	MR. FITZGERALD: End of March.
13	MR. KATZ: Yes, end of March.
14	MEMBER BEACH: And with that, the
15	Work Group will again schedule a meeting, I'm
16	sure.
17	CHAIRMAN MELIUS: Good. Okay.
18	That completes the Work Group reports that
19	we're able to go through. What I am going to
20	suggest, since we're running ahead of schedule
21	and we have nothing tightly scheduled between
22	now and lunchtime is that we take our break

now, that we return at 10:30 and we'll have LaVon then. And I think we will probably be able to break early for lunch also since we have a very limited amount of more work we can do until other Board Members arrive, until things get scheduled. So LaVon, you get practiced and get ready. We'll come back. would like to either try or schedule the other Board Members during our break here, to try to see if you can identify, find the public comment information, that email so that we can try to go through that quickly after LaVon's presentation. And also, prepare a lot of hard questions for LaVon since we have some time. We'll reconvene at 10:30. Thank you.

(Whereupon, the above-entitled matter went off the record at 9:59 a.m. and resumed at 10:40 a.m.)

CHAIRMAN MELIUS: Okay, I think we have everybody back. We will reconvene and we've added one of our missing Board Members has arrived, Henry Anderson, so welcome,

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Henry. Directly from SeaWorld. And Henry, for your benefit, we're way off. I'm on a funny schedule here so we're, LaVon's been moved up and then we're probably going to do a little bit of Board business and then break for lunch. We're packed into mostly stuff scheduled for this afternoon and tomorrow are preparing morning. So lots we questions for LaVon. LaVon.

MR. RUTHERFORD: All right, thank you, Dr. Melius. I'm going to talk about the status of upcoming SEC petitions. Again, we provide this update to the Advisory Board in preparations so they can prepare for future Work Group meetings, Board Meetings. They also have an understanding of what we currently have under our plate for evaluation — on our plate for evaluation and sites that we're getting new petitions for.

At the time of this, preparing this presentation we had 196 petitions. We now have 198 petitions. We picked up two in

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the last couple of weeks. So we have actually eight petitions in the qualification process. We have 117 petitions that qualify, five evaluations in progress and we've completed 112 evaluations. And you can see that 73 petitions did not qualify.

Currently we have а number petitions that are in the evaluation process. Clinton Engineering Works and Oak Ridge, Tennessee has been under evaluation for some We have actually determined it. infeasibility to do dose an reconstruction at Clinton Engineering Works for that time period so we are going to recommend a Class. However, the difficulty we're having at this time is defining a Class that can be administered by the Department of Labor. We presented a Class to DOL which was specific to the warehouses at the Elza Gate Labor based on and the Department of information they had at hand felt that they could not administer that Class. You know, a

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lot of times we will immediately go to, okay,
all employees at Clinton Engineering Works.
However, remember Clinton Engineering Works
was pretty much the entire site of Oak Ridge.
So what we're doing is we're going back and
we're doing some additional interviews with
some old-timers that were around during that
time period to see if they can provide us some
information. We're also going back and
looking at a lot of the data captures that
were done early on in the program for Oak
Ridge. We were not specifically looking at
Clinton Engineering Works. So we're going
back and reevaluating some of those data
captures to see if maybe we need to revisit
some of those sites. However, we do hope that
we will have something that the Department of
Labor can work with and we can make a
presentation on that at the February Board
Meeting.

Another petition that's under evaluation is Oak Ridge National Lab. This is

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the early years at ORNL. We anticipate completing that Evaluation Report sometime in February. That may slip a little because of some -- going back to review some air sample data. We're working that out right now. However, even at best I don't think we would be prepared for the February meeting, so I think it would slip to the next meeting anyway.

Sandia National Lab, we received a petition that actually worked out very well. It's funny me saying that but it worked out well in that this petition was for the post years. We've already added a Class up to 1962 at Sandia National Lab. We identified during that time that we did that evaluation that there's some additional work that needed to be done. And so this petition works well and we're continuing that work. We've qualified this petition, we're moving the evaluation forward. We hope to have that completed by March of next year.

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Titanium Alloys Manufacturing. received this petition back in July. We actually had recognized up front that there were some questions with the facility designation. It was a period of '50 to '56. However, based on our review, it really looked like the facility designation should have probably been the '55-'56 time period. back with this information went the Department of Labor and ultimately they have adjusted that time frame on that. We do anticipate having this report completed February and we may have this done in time for the February meeting.

Brookhaven National Lab. As I mentioned earlier with Josie we went back and we've been working through the issues of BNL with the Work Group and ultimately we made a determination that we do have an infeasibility and we do need to add another Class at Brookhaven National Lab. So we're working an 83.14 at this time. We will add -- to add the

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1980 through 1993 period. We have already received the Form A back from a proposed petitioner and we are moving forward to have this one presented at the February meeting.

We continue to do some evaluation. Grand Junctions Operation Office, we had added a Class sometime back. At that time when we added that Class we had informed the Board we were going to continue our evaluation for the post-1975 period. We wanted to review some additional data that was, that we knew existed at Idaho as well as at the NARA office. about completed with that. We've got some of that data in, moving forward. we're We anticipate having our Evaluation Report for the post-1975 period complete in March next year.

Sandia National Lab. Again, I mentioned we were -- had identified concerns at Sandia even for the post -- it says '60 period, but 1962 period. This additional work has now been pulled into this new petition we

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have and we anticipate having that work completed in March of next year.

Petitions in qualification phase We received another Hanford at this time. petition, that petition's in qualification phase. Iowa Ordnance Plant. This one, we have actually moved this one through petitioning process and we did not qualify this petition. This was a petition for areas that are currently not covered under Iowa Ordnance Plant. did We program at provide the information that the petitioner provided to us to the Department of Labor, in case there was anything that would possibly change their mind in the facility designation. Nothing did. So we've actually moved to close this petition and they have requested an administrative review.

We have a Rocky Flats petition that we're in the qualification phase with, as well another one for Savannah River Site.

Nuclear Metals, Inc. And then with the two we

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1	just recently received that are not on the
2	presentation are one for Ventron Corporation
3	and another for the Westinghouse Nuclear Fuels
4	Division in Cheswick, Pennsylvania. And so
5	those are moving through the qualification
6	phase. Also, Hangar 481 I wanted to update.
7	CHAIRMAN MELIUS: I may have
8	misunderstood you, LaVon, but I have a
9	question. You said there were six in
10	qualification and there's five there.
11	MR. RUTHERFORD: I know, I noticed
12	that actually, Dr. Melius.
13	CHAIRMAN MELIUS: Are you trying
14	to pull one over here?
15	MR. RUTHERFORD: The first slide
16	is wrong. There are actually five. Actually,
17	there are seven counting the two new ones we
18	got in and so that is, the second slide that I
19	presented which was identified six in the
20	qualification process is actually five.
21	CHAIRMAN MELIUS: We figured that
22	out without even toes.

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MR. RUTHERFORD: Yes, that was good. I threw that in there, I wanted to give you something to ask me.

CHAIRMAN MELIUS: Okay, LaVon, you're back.

MR. RUTHERFORD: Okay. One other thing I wanted to talk about was Hangar 481. Hangar 481, we completed our evaluation some The -- went through a number of time ago. little processes with the petitioner, went back to the site with the petitioner ultimately we were holding up moving forward on Hangar 481 because the petitioner had a FOIA request in. Just last week or, you know, last week we received from the petitioner an email that the petitioner wanted to withdraw that FOIA request. And so then actually this week, we actually received a subsequent email from the petitioner indicating that they were formulating a plan for an additional request. So I don't know exactly what they're going to request, I don't know if, you know --

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it wasn't clear that they had specifics with that FOIA request and I can't really say much more about it than that. And that's about it for my presentation. Questions?

CHAIRMAN MELIUS: I'm sorry, Ted was -- is the new FOIA request a -- have you seen that?

MR. RUTHERFORD: No.

CHAIRMAN MELIUS: You haven't seen that yet, okay.

MR. RUTHERFORD: No, we just got the email that indicated that he was planning another FOIA request but did not indicate what specifically he was looking for. Originally, I will let you know that the petitioner had indicated in the recent, the previous FOIA request they were requesting the interviews that we — they wanted the names of the individuals that were interviewed by NIOSH and so they could, I guess, re-interview those people. However, we can't release names due to Privacy Act. So they had indicated also

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1	that they may provide a letter to the Board
2	that would question the validity of those
3	interviews.
4	CHAIRMAN MELIUS: Okay. I guess
5	we'll wait but so chances are that may be
6	on our if you make sure we get an update at
7	our Board call?
8	MR. RUTHERFORD: Yes, I will.
9	CHAIRMAN MELIUS: Coming up on
10	that so we because that's been out there. I
11	think we want the petitioners to have
12	documents and information. There's been new
13	information developed so I think we understood
14	that but at the same time we sort of lose
15	track of these and we need to, you know, close
16	that out as a you know, handle it as
17	appropriate.
18	MR. RUTHERFORD: Yes. Okay.
19	CHAIRMAN MELIUS: Okay. Any
20	questions for LaVon? Yes, Paul.
21	MEMBER ZIEMER: You want me to
22	talk really slow, is that correct?

(Laughter.)

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MEMBER ZIEMER: LaVon, beyond the sites for and petitions that you're currently working on can you give us some idea of what's out there in terms of particularly AWEs for which there have been neither petitions nor claims? What's the pool of potential sites out there where we And obviously they won't all be in expect? that category but what's the maximum? talking about another couple of dozen couple of hundred?

MR. RUTHERFORD: I think around a hundred, as Stu had just mentioned to me I think a hundred at the most would be left that either we don't have any claims for, you know, that -- in fact, and I'll bring this up, at one point, at one time we had thought about actually taking these sites and that we don't have a claim for that's currently covered under the program and putting together a short summary of what do data we have, what

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information do we have. And so we can be prepared when we do get a claim in does this one really need to move right away to an 83.14 or what. It's still on our list to do that but we haven't got there yet, I mean, from all the other work that we have.

MR. HINNEFELD: Yes, I'll comment on that. We have so much work still to do that we know we have to do that we didn't want to spend a lot of work on a speculative maybe this will come in handy later on. So it's a matter of prioritizing the work.

MEMBER ZIEMER: Right, and I certainly wasn't expecting you to do that. I was just trying to get a feel for what's out there still and wondering if, for example, if there might be a number of these sites for which the contracts are for things that didn't actually require people to work with nuclear materials. Contracts that might have been for theoretical studies of one sort or another, but we don't necessarily know that at this

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MR. RUTHERFORD: No, I think what we typically see is when we get a claim in or we get a petition in, we find that information out when we initially do that initial research and then we jump on it, push it through.

MEMBER ZIEMER: Thank you.

CHAIRMAN MELIUS: Just to follow up on that because one of the reasons I had asked Jeff for sort of an update outreach program. My understanding is that in general and probably as appropriate DOL does their outreach after, you know, a site like an SEC would be approved. And this would apply also to the AWE sites. And I guess I don't know, again, reviewing 200 sites is a lot of work to do but at the same time if there are sites out there that are large and we think that there were, you know, the potential for substantial exposures, you know, you wonder. I mean, because you look at some of these sites even when we do get an 83.14 there are really

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very few claims.

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MR. RUTHERFORD: You're correct.

CHAIRMAN MELIUS: You know, and even though I think some of them have had at least, you know, some significant exposures out there and you know, given time going by and so forth there are at least some pool of claimants that there ought to be outreach for or some way of letting them know about the program just out of, you know, a basis for being fair and equitable. So as you're, you gathering information whatever, or there's some way of sorting it that way or at least identifying key sites and so forth. then maybe we'll talk more when next meeting if Jeff gives us an update on the outreach and so forth. But it's sort of hard for DOL to do outreach without knowing a lot about the site and where it hasn't been developed so it's a little bit of a chicken/egg kind of thing. But how people would find out. I remember the gentleman from an 83.14 we had I think several

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months ago who -- was the USA Today articles 1 2 or whatever that ran, what, 10 years ago? 3 program started was what got him, you know, he remembered that his father had worked at one 4 5 of these facilities and that they'd mentioned. 6 MR. RUTHERFORD: Yes, it was 7 Westinghouse Atomic Power Development. I remember. 8 9 CHAIRMAN MELIUS: Yes. So I mean 10 it's -- and there hasn't been a USA Today article in I don't think -- you know, that one 11 12 just covered, I can't remember how many sites 13 but it certainly wasn't didn't all of information them least 14 on or at 15 detailed enough for people to recognize. So 16 point when we have sort of some resources and the time I think it's worth 17 18 trying to look at it not as a big project but 19 is there some way of narrowing that down. 20 MR. RUTHERFORD: Okay. CHAIRMAN MELIUS: Other questions, 21 comments from the Board? 22 I have one other

question, it's just probably my memory, but
for Brookhaven the 83.14, is that a new issue
or is it a continuation of sort of the older
issues there?
MR. RUTHERFORD: It's a
continuation of the old, the issue that we had
previously identified a question of records
and being able to retrieve those records. It
is a continuation of that same issue.
CHAIRMAN MELIUS: And it's a
little bit surprising to me that it would
at that type of a facility that would extend
for such a long period of time. I mean, I
don't doubt you but it's just, '80 to '93 is,
that's
MEMBER BEACH: The Work Group is
not surprised.
CHAIRMAN MELIUS: Okay.
MR. RUTHERFORD: I don't know if I
want to comment on that.
CHAIRMAN MELIUS: I'm not
expecting you to.

1	MR. RUTHERFORD: Exactly. We're
2	working with Brookhaven to find out where
3	their records are and ensure that, you know,
4	that they are getting us the records that we
5	need. I mean, the difficulty we have is when
6	we get a claim and we do a search on our
7	records and we have more records than they're
8	providing from the DOE. When DOE requests the
9	data from them, or where the DOE request goes
10	in and they send us the personal dosimetry
11	records and then we do a search on our
12	internal records and we're coming up with more
13	personal dosimetry data, that immediately puts
14	their records management in question.
15	MR. HINNEFELD: Just to clarify
16	these are things that we have captured on a
17	data capture.
18	MR. RUTHERFORD: Yes.
19	MR. HINNEFELD: We've gone there
20	on data captures, brought these records back
21	and then subsequently would send a records

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request for an individual, get that person's

record back and it, the record that Brookhaven returned to us for the individual would not include data that had some we captured independently on a data capture. That's the issue we faced there. We actually have a staff member meeting next week with Brookhaven personnel in person along with Greg to try to see if we're really getting their attention.

CHAIRMAN MELIUS: Okay. Greg, do you want to comment?

MR. LEWIS: Yes. It's an issue that we thought we had addressed before. the one thing I would say from our standpoint, it's not -- there's been some concerns with how comprehensive their records were. gone out, we had addressed that. There have of collections t.hat. been а number were indexed. There was a large, a huge I'd say warehouse but it was really like a two, a double room where we had scanned and indexed everything in there. And we kept thinking we had solved the problem by taking those steps

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and lo and behold we find another case where they didn't match up. So we're, you know, this meeting, our aim here is to get all of the groups at Brookhaven together who have records and figure out, you know, either how are things slipping through the cracks or where are, you know, why does NIOSH have records that we are then unable to find. you know, we're trying to get to the bottom of it and actually solve it so we don't have these reoccurring issues, because again, we thought we had addressed this about a year We thought we had finally fixed the ago. problem so we're hoping to get it right this time.

MR. RUTHERFORD: I think one of the challenges you have with these national labs is you have so many different little entities on a site and they all seem to manage, especially like Brookhaven, they manage their own records. There was no central repository for records management as

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1	you see like with some of the other production
2	facilities, you know, where you had a central
3	repository. And some of these national labs
4	you don't see that.
5	CHAIRMAN MELIUS: So do we think
6	that this same issue applies at some of the
7	other?
8	MR. RUTHERFORD: We're reviewing
9	that at Sandia National Lab
10	CHAIRMAN MELIUS: Sandia, that's
11	what I was thinking.
12	MR. RUTHERFORD: at this time.
12 13	MR. RUTHERFORD: at this time. CHAIRMAN MELIUS: Yes.
13	CHAIRMAN MELIUS: Yes.
13 14	CHAIRMAN MELIUS: Yes. MR. LEWIS: And I would say yes,
13 14 15	CHAIRMAN MELIUS: Yes. MR. LEWIS: And I would say yes, there's definitely difficulties at the
13 14 15 16	CHAIRMAN MELIUS: Yes. MR. LEWIS: And I would say yes, there's definitely difficulties at the national lab. I don't think that they all
13 14 15 16	CHAIRMAN MELIUS: Yes. MR. LEWIS: And I would say yes, there's definitely difficulties at the national lab. I don't think that they all have the same level of difficulties that we've
13 14 15 16 17	CHAIRMAN MELIUS: Yes. MR. LEWIS: And I would say yes, there's definitely difficulties at the national lab. I don't think that they all have the same level of difficulties that we've run into at Brookhaven.
13 14 15 16 17 18 19	CHAIRMAN MELIUS: Yes. MR. LEWIS: And I would say yes, there's definitely difficulties at the national lab. I don't think that they all have the same level of difficulties that we've run into at Brookhaven. MR. RUTHERFORD: I agree.

had them before. Is this a new 83.14 or 13?

Is it a new time period or a new area? Just very briefly what's the nature of that one?

MR. RUTHERFORD: Actually it was an 83.13 and it was a new petition. It was for an area that is currently not covered in the program. And the petitioner petitioned for this, actually petitioned for We initially told the petitioner this area. that you need to go through the Department of Labor to have that done, to see if that area can be added under the facility designation. They indicated that they had done that. provided the information that the petitioner provided to us, we provided that to Department of Labor. Department of Labor came back and said, you know, again that this area is not a covered area under the program and therefore we moved to close that petition. petition standpoint's from our administratively closed. However, that petitioner did administrative request an

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1	review and so it will go to the three-person
2	panel appointed by the director for that
3	review.
4	MEMBER ZIEMER: So it's an issue
5	of whether or not this other area should have
6	been covered by the existing work that we
7	already looked at.
8	MR. RUTHERFORD: Well, I know it's
9	an existing it's whether this area should
10	be is a covered area under the program
11	itself.
12	MEMBER ZIEMER: Oh, okay.
13	MR. RUTHERFORD: Yes. And so
14	that's not something that we would consider,
15	NIOSH, and that's why we provided that
16	information to the Department of Labor.
17	MEMBER ZIEMER: So this one
18	possibly wouldn't even come to us then.
19	MR. RUTHERFORD: Yes, more than
20	likely it will not come to you unless for some
21	reason the administrative review panel found
22	some other reason that but again, even the

1	administrative review panel can't make a
2	decision on what to add to area. That
3	decision has to be made by the Department of
4	Labor. So I would not expect to see this one.
5	MEMBER ZIEMER: Thank you.
6	CHAIRMAN MELIUS: Any further
7	questions or comments for LaVon? Okay. We
8	let you off easy, LaVon. So, Henry, we went
9	through a number of the Work Groups' reports
10	before. I think Hooker, we're going to get
11	updated on and I don't know if there's
12	anything else to update on.
13	MEMBER ANDERSON: Well, we
14	discussed others but. We did discuss others
15	and there we're waiting for updates from
16	NIOSH on those. So it's, United Nuclear is
17	one of those. So there's going to be some
18	changes made and responses but other than
19	that, Hooker was our major focus.
20	CHAIRMAN MELIUS: Right. Good,
21	thank you.
22	MEMBER ANDERSON: Our next meeting

will be a teleconference.

CHAIRMAN MELIUS: Okay. Okay. I'd like to turn now to the public comments from the May meeting. And that was the email people got on December 2nd from Ted. Was everybody able to access that in some way?

MEMBER BEACH: Yes.

CHAIRMAN MELIUS: Henry, I can't remember if you were, I don't think you were here yet. We're talking about the tally of the public comments from the May meeting. It's a listing and a spreadsheet and the attached transcripts and so forth that are in there. And I think these are usually relatively straightforward and just really two pages is what I have on my computer and so forth.

MR. KATZ: While you're doing that let me just, I noticed there are some more people from the public who have joined us and I didn't make an announcement earlier this morning because it was thin in here but I'll announce it again later this afternoon. There

is a public comment session today. It begins And for those of you in the public who are here in the room who would like to make comments, there's a sign-up sheet at the table outside this door immediately to your left. So if you would sign in. There are two, actually, sign-up sheets. There's one that's just signing in that you're registering your attendance at the meeting, but there's second sheet if you wish to comment during the public comment session. You should, when you have a chance, there's no rush, you can do it at lunch or whatever but sign in if you want to make public comments so that we can order the public comments and get through those in an expeditious way. Thanks.

CHAIRMAN MELIUS: So I'm just going to go through these one by one but I think we can do it briefly. They're pretty straightforward. First set of comments have to do with Fernald site and were directed to the Work Group and to the NIOSH technical

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person handling it, Mark Rolfes. I think those are pretty straightforward and appropriate.

The next comments are Robert Stephan who reading letter from was а Representative Costello regarding General Steel Industries. Τ think that was acknowledged and so forth there, that.

The of next set comments were related to, two were related to, the first two Rocky Flats regarding, essentially were referred to the Work Group and that Work Group has since met so Mark may have already addressed those in the Work Group meeting. I'm not sure on that. There was an FOI question that was related to the FOI office.

And there's some questions Hanford from one the Hanford petitioners about some new information and I think they were about concerned whether those were whether NIOSH was of some of aware information. And as I recall some they were,

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1	some they weren't, but they said they would,
2	Sam Glover was here. He said they would
3	follow up and so forth on information. So
4	anybody have comments? That's the May 24th
5	listing I have. Any questions or any Board
6	Members have? Okay.
7	MR. KATZ: Sorry, Wanda, I can't
8	read lips.
9	MEMBER MUNN: I was wondering if
10	you re-sent that to my CDC email address.
11	MR. KATZ: Sure, I'll resend it.
12	CHAIRMAN MELIUS: Ted reached your
13	limit.
14	MR. KATZ: Well, actually I don't
15	know if I have it on here. Do you have it to
16	send it to your email?
17	CHAIRMAN MELIUS: So for May 25th,
18	I have a comment from one of the petitioners
19	thanking us for rapid response to the Sandia
20	SEC petition and really no follow-up necessary
21	on that. Another petitioner related to
22	Hanford really was just making a statement

relative to that petition and I think as Arjun's already reported we'll have a review of that, of the NIOSH evaluation of that petition shortly and the Work Group will be meeting to discuss that. Another comment on Hanford again related to US Testing and so forth and it's the same, the same issue and same response.

There from the were comments Weldon Springs related to that person there, again related to concerns about the data quality and the SEC review process there. We'll have an update on that this afternoon but those comments are referred to the Work the NIOSH technical person, Group and to appropriate. Some more appears to be similar comments on the Weldon Springs and again directed in the same way and so forth.

And comments from the, I guess someone related to the GE, a former worker at GE-Evendale and again, sort of concerned about how long it had taken for the follow-up

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review. And again that had been addressed actually at that last meeting. We approved it. So these were really for that. And two other similar comments there. Again, it was approved.

So anybody have any questions or comments on those referrals? Again, we're talking about the referrals of these, not — when we know about the resolution we can talk about it but you know, again, these are back in May and it's really, were the comments appropriately referred and are they being followed up on sometimes takes time. So if there are no questions or comments on that. And again, Wanda, I know you may not have had time to review or refresh yourself on this and if you have comments later on we can come back to it. I don't want to —

MEMBER MUNN: I have seen it before and didn't have comments the time I saw it the first time.

CHAIRMAN MELIUS: Okay. Good.

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1	MEMBER ZIEMER: I do have a
2	question. I just want to follow up on the
3	General Steel Industries one. It said that
4	the response went to Ted and to DCAS. Was
5	there a response to the individual who
6	indicated the concern? This is item number 6
7	in the matrix there. I believe it was
8	MR. HINNEFELD: I'm going to have
9	to see it. I didn't print it.
10	MEMBER ZIEMER: I think it was one
11	of the Illinois staffers, that is, the I'm
12	trying to remember her name.
13	MR. KATZ: It was a letter from
14	Costello that Robert Stephan read.
15	MEMBER ZIEMER: Right, the
16	MR. KATZ: Yes.
17	MEMBER ZIEMER: Right.
18	MR. KATZ: So it was referring to
19	
20	MEMBER ZIEMER: response to
21	either Mr. Stephan or Costello?
22	MR. KATZ: So I don't know about a

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response from DCAS but it was also just referred to in other words to you as the Work Group chair.

MEMBER ZIEMER: Right, but the issue is beyond the Work Group. There's an implication that there's a Board policy which I don't think there actually is a policy one other. There's the no policy way or restricting Work Groups on putting time limits on when they finish their work. In absence of a time limit, I suppose that can be implied as being a Board policy that you have unlimited time. But I just wondered if there had been a response to Mr. Stephan or if there was any statement implying what the policy is.

MR. KATZ: I think Jim or you, I think Jim responded at the time to Robert Stephan to explain that we were concerned about timeliness and about moving this along but this is sort of a case where there's just been a lot of material generated and it's, that's been why this one has taken exceedingly

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1	long.
2	CHAIRMAN MELIUS: That's my I
3	can't pull up the transcript quickly enough
4	to.
5	MEMBER ZIEMER: As far as you know
6	the response was the verbal one.
7	CHAIRMAN MELIUS: Yes.
8	MEMBER ZIEMER: Okay. I just, I
9	couldn't remember.
10	CHAIRMAN MELIUS: It's an
11	appropriate question. Any other comments?
12	Okay. If not, I think we, and I don't believe
13	we have any other Board business that we can
14	conduct until we have everybody here.
15	MR. KATZ: For scheduling, we
16	should have everyone else.
17	CHAIRMAN MELIUS: Yes, we need to
18	have everybody here, as many as possible
19	anyway and do that. So we will now break and
20	we will reconvene at, I believe at 1:30.
21	MR. KATZ: Yes, we can lock up the
22	room if you'd like to leave your computers.

Absolutely.

CHAIRMAN MELIUS: So we will reconvene in this room at 1:30 and the first item of business will be the Hooker SEC petition.

(Whereupon, the above-entitled matter went off the record at 11:20 a.m. and resumed at 1:34 p.m.)

CHAIRMAN MELIUS: Okay, we'll get started now. Welcome back, everybody, to our Board Meeting and I'll start with letting Ted make some announcements and check the phone.

MR. KATZ: Yes, welcome, everyone, for the afternoon session. Let me just remind then people, I don't know if we have any new public members here this afternoon yet but we have a public comment session that begins at 5 o'clock and if you'd like to make comments, please sign in on the sign-in sheet at the front desk. There are two sign-in sheets, one's for just signing in to attend the meeting but the second is to sign up for

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public comments. Please do that at some point this afternoon if you wish to make comment.

Let remind me everyone on the phone line of two things. One, please mute your phone except when you're addressing the group and if you don't have a mute button, press *6 to mute and *6 to come off of mute. And also please, someone at some point this morning put the call on hold and we had their music, we had to cut them off. So please don't put the call on hold at any point. Hang up and dial back in if you need to leave the call and you won't disrupt the call for the other folks, especially for the other folks on the phone line who will only be hearing your music. Okay and I think that covers it for me.

CHAIRMAN MELIUS: Okay, very good.

Okay, we will start our first item of the afternoon: the Hooker Electrochemical SEC petition. Henry Anderson, I think, will do a presentation. Thank you, Henry.

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MEMBER ANDERSON: Okay, as all of you should remember in August we went through a review of a Special Cohort Evaluation and what I'm going to give you today is a bit of an update. You gave us some charges, our Work Group to go back.

But just to update everybody, Hooker was classified as an AWE employer facility from ' 43 to '48 with residual а period up to '76. They primarily produced non-radioactive chemicals at the facility but did during period of thev that time concentrate uranium-contaminated mag fluoride slag using hydrochloric acid from their P-45 A special building was constructed the concentrating operation, that to do building was completed in 1944 and most of the slag-handling was conducted outdoors indoors was the dissolving and concentrating process, and then the de-watering, I guess. It's not watering, but making a dry sludge which then re-packed. Material was was

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concentrated from about 1 percent to 2 percent and the incoming material was 0.2 percent uranium by mass.

The slag came in 500-pound barrels from Electro Metallurgical. We've talked about that site as well. Barrels were then dumped onto a conveyor belt, carried the slag digest and into the tanks then hydrochloric acid was added and diluted to the Tanks were agitated and then about once every two days the liquid was decanted, more hydrochloric acid was added and the digestion, the slurry was then neutralized, pumped through a filter press. The filtered material was then put back in barrels again to be shipped on for further processing. So it was a fairly straightforward process, I think, that we've seen at some of these other sites, very similar to the other facilities that the committee, the AWE committee has been looking at.

The cohort petition main

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contention was that there were unmonitored workers. They presented an affidavit indicating there was no internal or external monitoring done at Hooker and NIOSH could find no indication of monitoring in the records either.

The dose reconstruction methodology was originally described in an Appendix AA to the TBD-6001. Then, when the TBD-6001 was retired and each of the individual sites were then given their own TBD a Hooker TBD replaced the Appendix AA. changed in the proposed method of reconstruction including revising the approach to the use of surrogate data for internal dose reconstruction. The petition timeline was submitted on March 9th with a proposed Class for the furnace room. The finding was not qualified initially, went back to the petitioner with some suggestions. A proposed Class revision was sent in on the 26th of September. It was qualified for evaluation in

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October and in May of 2010 the Evaluation Report was issued and it was assigned to the AWE formerly 6001 Work Group for review.

We went through this at several meetings of the Work Group and after SC&A's review and our discussions with NIOSH in August, again keeping in mind that our meeting was shortly before the August presentation and therefore not a lot of time had transpired for the petitioners to get access to the minutes from our Work Group meeting. But we did make a recommendation of denial in August. The Board after some discussion, tabled t.he recommendation of denial and requested that we obtain a more detailed review of the surrogate data assessment and we tasked SC&A to do that. And this also would allow more time for the petitioners to get access to documents as well as the minutes of our Work Group meeting.

In September we, AWE, the Work Group received a report from SC&A further detailing what they did and how they evaluated

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the NIOSH proposal for surrogate data use. You should all have received that memo as well. Our Work Group met on the 21st of November to discuss predominantly the White Paper as well as to review any other outstanding issues. And as you'll see from the document, the original surrogate data proposal by NIOSH was based on analysis of 18 air samplers for handling of C-2 slag at three different facilities, Electromet, Fernald and Mallinckrodt.

Predominantly the samples that were available and included in that were from Fernald. They used the upper 95th percentile of sampling results in that air exposure reconstruction surrogate data modeling, and as you'll see more than 70 percent of the air residual samples are BZ. The period deposition/resuspension model used was the one that has been used in other sites for residual periods with a resuspension factor of one to ten to the minus sixth per meter and no source term decay.

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So the modeling was predominantly done for the handling of slag in the wooden barrels based on the MCNPX calculations. Exposure to workers and surface contamination again was based on those calculations of slag dust settling from the 95th percentile air So the critical issue here is concentration. the surrogate data, the establishment of the 95th upper percentile and then from that flows the exposures on surface contamination, External dose rates for the residual cetera. for the operating period were the same as period.

May NIOSH issued their White In Paper as I said for the use of surrogate data. That has been expanded upon now and initially requested NIOSH to revise the White Paper so that it would be better, it was clear where the samples came from and what they were and how they were used. That was done and forwarded that to SC&A for their review which they did. Then this was all

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before the August meeting and they felt that
they used as a measure our Board guidelines
for the use of surrogate data. The NIOSH
White Paper had gone through addressing each
one of our surrogate use criteria and SC&A
felt that the selected surrogate data would
result in a plausible bounding estimate for
the internal exposures at Hooker. The Thurber
September 22nd memo, SC&A when they presented
and did the discussion in August pointed out
that there actually were, or they felt that it
was appropriate to use an expanded number of
samples anywhere. Their initial review they
used 67 samples and there were some additional
samples and they felt several of the samples
that NIOSH included in their use of the 18
probably didn't quite fit the criteria so they
removed those. So the total number of samples
is somewhere between 67 and 72 that SC&A used.
And when they calculated using that expanded
number the upper confidence limit really was
quite similar to what NIOSH had found. NIOSH

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was using 806 as the upper 95th percentile with the expanded analysis. The two different analyses, SC&A had a low value of 555 and with the larger number of samples, the 759 value all pretty much within the same range.

SC&A and our Work Group concluded that when one is looking at the percentile it's not particularly sensitive to the differing technical judgments of the two groups on which samples to select. our Work Group felt that the use of only 18 samples might be a bit on the small side so we were very I would say comforted to see that when SC&A expanded it in fact it -- you now had a more robust database but the results really were quite similar and in fact NIOSH value which turned out to be a higher therefore would in fact be sufficiently protected.

After our meeting and discussions in November we continue as a Work Group to believe that the surrogate data used as

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proposed followed our criteria and therefore was appropriate to use it when one uses our criteria the measure. The doses for as workers at Hooker can be plausibly reconstructed using the information in Hooker TBD and we continued to hold to our previous recommendation on petition SEC-0014 that it be rejected, that in fact doses could be reconstructed.

There were three remaining issues that were also discussed in August and that is simply the use of surrogate data, that in fact there were no measurements at this facility. But our criteria for the use of surrogate data I think were quite carefully evaluated. Again, the total number of samples used could be argued we never set a lower limit to make it representative or reasonable. Then the issue was also raised that for our surrogate data use a large proportion of those samples came from Fernald and the Fernald Work Group really had not spent much time looking at the air

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data because they were actually using the biomonitoring data which again in our protocol we always go with the biomonitoring data before we would kind of default to the air monitoring data. And there was some question about whether the Fernald data was reliable and therefore we should use it.

Our Work Group, we really weren't in a position to review all of the air data or all οf the data from Fernald to make judgment on whether or not it's reliable or But that's one of the issues we'd like to discuss today and we had asked NIOSH to present. They had looked at it, looked at the challenge to that data and whether particular set of data that we're using could be determined to be reliable and therefore appropriate for use with the surrogate data. If one takes out the Fernald data then the total number of, in the original number of samples that using falls NIOSH was substantially and into the small we get

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numbers on yes, it is comparable or useful data but is it robust enough to actually use to calculate surrogate exposures.

Then the third issue was raised to We as a committee were not aware that the us. petitioners had а FOIA request in and therefore they had requested that we postpone at this meeting further decision-making until they had actually received a response to the FOIA since our Work Group wasn't familiar with what the requests were in the FOIA. And since then I don't know if, Ted, you want to speak to the FOIA issue or not but my understanding is it was a rather generic request for all email traffic of which NIOSH now has identified some 4,000 documents which now have to go through redacting out personal names and things like that in it where in the past when we've postponed it's typically been that the FOIA request was for technical documents that the petitioners had not been able to access to or review where this one is a much

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1	more generic type of request. And again the
2	issue would be do we delay what could be a
3	number of months as the FOIA review and
4	approval works its way through HHS and then
5	over to DOL as well. And the FOIA request
6	went in I think about four months ago, was
7	that what we found out?
8	MR. KATZ: I think the end of
9	August.
10	MEMBER ANDERSON: End of August,
11	so it's been in the works for awhile. But it
12	really is unlikely to uncover a great deal of
13	new, or any new technical information as best
14	we can tell. So that, these are really the
15	three issues that we bring to you and I don't
16	know if NIOSH, someone wants to? I'll turn it
17	to John and let him talk about the Fernald
18	data.
19	CHAIRMAN MELIUS: Ted needs to say
20	something and then I wanted to say something.
21	MR. KATZ: So before we launch
22	into any discussion about the Fernald data two

things. One, I need to note for the record that Dr. Lockey has a conflict with Fernald so he will recuse himself from any discussion of Fernald. He doesn't need to leave the table because this is about Hooker, not Fernald, but he does need to recuse himself from the discussion.

Likewise there are a couple of DCAS staff here who also have conflicts. Ι believe it's Jim Neton and Stu Hinnefeld, is And LaVon Rutherford, okay. that correct? Oh, and Pete Darnell is waving his hands, Those individuals too would of that's four. course not participate in any discussion of Fernald. So I just need to note that for the record. They don't need to leave though because again this is not about Fernald, it's about Hooker for the most part.

And the other thing, I just wanted to check as well on the line whether we have, since we're discussing an SEC petition at this point whether we have Mike Gibson on the line?

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1	And Mike, if you are I assume you're on mute.
2	You might have to un-mute yourself to let us
3	know. And Mark Griffon, do you know? Mark
4	Griffon, are you on the line possibly? And I
5	guess I could try too Richard Lemen who's the
6	third missing Member. Are you on the line?
7	Okay, not hearing them unless they pop up
8	shortly we'll assume they're absent right now.
9	CHAIRMAN MELIUS: Well, before the
10	recusals do not participate I was going to
11	open it up if anybody had questions for Henry.
12	Josie, go ahead.
13	MEMBER BEACH: Henry, I just have
14	a quick question. Your Work Group recommends
15	to reject this SEC. Was that a unanimous
16	decision within the Work Group?
17	MEMBER ANDERSON: Yes, I believe
18	so.
19	MEMBER BEACH: Thank you.
20	MEMBER ANDERSON: The Work Group
21	is only three, so.
22	MEMBER BEACH: That's why I was

1 wondering. 2 CHAIRMAN MELIUS: Okay, any other 3 Board questions? 4 MEMBER ANDERSON: And again, 5 really the measure we used was not do we want 6 to use surrogate data or not but rather does 7 it meet the criteria that we laboriously worked through for the Board. 8 judgment was it met our criteria, 9 so our 10 therefore it would be appropriate to use it if 11 you're going to use surrogate data at all. 12 CHAIRMAN MELIUS: Okay. No more 13 questions for Henry. Why don't we hear I believe Mark. Are you? And those of you that 14 15 have recused are recused. 16 MR. ROLFES: Yes, this is Mark Rolfes with NIOSH. I'm a health physicist. 17 I've been involved in the Fernald Work Group 18 19 for I guess, I've been responsible for the 20 Fernald site for probably about the past eight or nine years and have been working to review 21

the Fernald air sampling data, the Fernald

1	data. We did
2	MS. GIRARDO: Hello? My phone
3	died out and I had to call back in so I don't
4	know what sorry I missed.
5	MR. KATZ: Mary, hi. This is Ted
6	Katz. That's Mary Girardo I believe on the
7	line. Mary, right now we're in presentation
8	phase of this discussion of Hooker. Okay? So
9	this is not a comment session yet.
10	CHAIRMAN MELIUS: Yes, we will
11	open it up. There will be a chance for
12	comments in a few minutes.
13	MS. GIRARDO: Okay, thank you.
14	MR. KATZ: Thank you.
15	CHAIRMAN MELIUS: Go ahead, Mark.
16	MR. ROLFES: I believe one of the
17	concerns with the air sampling data, we had
18	received an affidavit. It was actually
19	prepared for a court case earlier on or for a
20	court hearing involving the Fernald site. That
21	was an individual who had indicated that he
22	had been asked to conduct some re-sampling of

high airborne operations in plant 5. Now,
this was involving green salt materials, it
was involving the uranium and not a uranium
contaminated material such as magnesium
fluoride. But the concern about the air
monitoring data, this individual had indicated
that he had sampled the operation and had
gotten an air concentration above the maximum
allowable concentration so he was asked by his
supervisor to re-sample that operation once
again. This apparently occurred another five
times. So he had been asked to re-sample this
high air concentration operation approximately
seven times. On the last time he was told to
re-sample again and he had indicated that he
had sampled in a location upwind from the
workers' breathing zone. And at that time he
had obtained a result which was below the
maximum allowable concentration.

So we have no indication that the first seven data points are destroyed or manipulated in any way. There's a possibility

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1	that the final data point for this particular
2	operation could have been manipulated to
3	appear to have had a lower air concentration.
4	However, if you take a look at the data that
5	is collected we have no indication that the
6	first seven data points were destroyed and we
7	don't believe that the distribution of the air
8	concentrations for that particular sample
9	would be skewed significantly by one low
10	sample. I don't know if there are any
11	additional details that you would like but we
12	do have this individual's affidavit available
13	to us, and then also a deposition which
14	clarifies some of the points of this
15	particular single air sample where the
16	individual had expressed concern that he was,
17	he felt that he was manipulating some of the
18	data.
19	MEMBER ANDERSON: Could you
20	comment on the dates when this happened?
21	MR. ROLFES: The individual did

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specify a

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he only

date,

specified a particular operation which was the plant 5 jolting operation where they were compacting green salt and magnesium prior to reducing it into uranium metal. It is possible, well the Fernald facility didn't operate until after Hooker was closed. So as far as the specific data I don't have one because one was not provided to us.

I quess I have a CHAIRMAN MELIUS: question though it's more for SC&A to comment I don't know if Bill Thurber is on the line who wrote the report but I think the question is in your review of this the data set, did you think --Ι think and conclusion was that it was robust enough -pardon me, Wanda -- and also that there was appropriate in terms of what operations were covered to be used for this. In some ways it could be a separate determination on, I guess what I'm getting at, on Fernald itself because there may be other operations and so forth and the comprehensiveness or utility of the data

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for that could, you know, could reach a different determination. So, that's -- I guess it's sort of, you know, we're focusing in here on sort of the utility of this and appropriateness of this Fernald data set for use in -- on the Hooker facility. Is that?

DR. MAURO: Yes, I understand your question. This is John Mauro, I'm with SC&A. Bill Thurber I do not believe is on the line. I spoke to him earlier to see if he could join us but he was engaged in some other matters. But we did speak at length about it to refresh my memory regarding the matters with regard to this specific issue. And he was very careful in selecting data related to the handling of the slag type material so that he picked air sampling data that was as closely related to the operations. And it did not only include Fernald, but it also included these other two facilities.

And so I guess to answer your question the data set, now I just -- we didn't

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investigate the issue related to Fernald and the questions that were just answered by Mark but all I can say is it sounds like the data set that was at question at Fernald really was the different airborne samples and operation than the particular type of dumping operation related to this dolomite slag type material. So the best I can do is say that I believe the data numbers set that the of was measurements that were selected by specifically for this analysis is probably not affected by this particular issue that raised earlier. And I think Mark addressed that matter if that helps.

CHAIRMAN MELIUS: Yes. I would just, I guess in thinking about it is here we have actually, you know, two different -- you sort of independently went back to the sampling data set and essentially made a, I won't say it was a completely independent selection but sort of re-looked at the whole selection issue --

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DR. MAURO: Yes.

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CHAIRMAN MELIUS: -- in terms of its appropriateness. So again, I think that it speaks to, you know, that would something that would certainly lend credibility to this part of the process. Yes, thank you. Dr. Poston? Oh, okay. Brad, okay. I'm sorry, I was -- I guess he put it up and you moved your hand at the same time and I just.

I just bring into MEMBER CLAWSON: question because the Fernald Work Group is not using air sampling data because it was in question and that's why we went to the bio And Mark brought that up but we have not dug into if the air sampling data is good. There is an affidavit out there that it was questioned and Mark brought up numerous times that there's nothing to say that this was taken out, this information, but nothing to, you know. There's many questions with the air sampling data on it, especially

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CHAIRMAN MELIUS: Dr. Ziemer?

MEMBER ZIEMER: But in the hierarchy of things I think the bio-samples take precedence in any event over air sampling data. It was not, maybe Mark can clarify but I thought that was the rationale as opposed to the credentialing of the data in some way.

ROLFES: That's correct, Dr. Ziemer. Anytime that we have bioassay monitoring available to us we would use that as one of the highest pieces of, you know, one of the pieces of information that's highest on the health physics hierarchy of data that we would use to perform a dose reconstruction specific for an individual. Because of the wealth of information t.hat. for we have Fernald, the number of bioassay samples that we have collected there's no need for us to use the uranium air sampling data.

CHAIRMAN MELIUS: David?

MEMBER RICHARDSON: I'm afraid the

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1	conversation is making me more confused, not
2	less confused. The document that documents
3	that we're looking at regarding Hooker are
4	using the Fernald air data, is that correct? I
5	mean, they're described here as air
6	
	concentrations. So the issue of the hierarchy
7	is I don't think germane to how the Fernald
8	data are being applied to the Hooker
9	situation. If I'm understanding the
10	discussion correctly we're back to estimation
11	of air concentrations for Hooker based on
12	Fernald air monitoring data.
13	MEMBER ZIEMER: Well, let me
14	clarify what my point was. I thought there
15	was an implication that the Fernald Group was
16	not using the air sample data because of
17	questionable credentials as it were, but the
18	reason it's not used has to do with the
19	hierarchy issue. That was my point.
20	MEMBER RICHARDSON: Okay, okay.
21	MEMBER CLAWSON: And part of my
22	point was because the Fernald Work Group,

because we are not using that air sampling data we have not gone into it and dug into it as we could because we used the bioassay.

CHAIRMAN MELIUS: And Ι think, this is a further point but I think one of the points I was trying to make is that I'm not sure it is necessary before we act on Hooker for you to have done that given the selection, given the process that's in place for applying that in the Hooker evaluation. I quess I'm not as concerned about that in terms of the application given the way that we're using that data, given what we know about it and given the way that the data was selected. again, if this were being used in Fernald I could actually see where the Fernald Group could different determination reach а depending as you would apply it to overall workforce. It can differ and I think it's how are we using it as applied to the Hooker operations and the type of work that was done at Hooker. Any other comments or

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1	questions?
2	MEMBER RICHARDSON: So is the
3	argument that there's coherence between
4	evidence from Electromet, Mallinckrodt and
5	Fernald and therefore we're not hanging our
6	hat entirely upon the Fernald air sampling
7	data whether some of us have concerns about it
8	or not?
9	CHAIRMAN MELIUS: That. Yes,
10	that's one. Sort of a separate, in some sense
11	validation by the fact that we have at least
12	to some extent was an independent selection of
13	samples by SC&A for use, simply developed
14	their own data set for use here. And again,
15	so we're not as reliant on just simply one
16	group, NIOSH going in and making that
17	determination. Yes. Any other questions at
18	this point? Okay.
19	MEMBER RICHARDSON: Could I ask
20	one question of SC&A?
21	CHAIRMAN MELIUS: Sure.
22	MEMBER RICHARDSON: This was about

-- I mean, one of the other issues with using surrogate data is not just extrapolation between places but also extrapolations over time. And here some of the samples that we're talking about are taken let's say a decade to two decades after the period of operations. You're shaking your head no.

DR. MAURO: The timeliness -- I remember the surrogate data report, I reviewed it, Bill prepared it and timeliness was one of the issues. And I recall the position, and I'd have to look at it again, was that the timeliness was supportive. In other words, it wasn't that we had a break there. There's five criteria and that was one of them. And I can't give you the dates but I recall our finding was that the timeliness worked in a favorable way.

MEMBER RICHARDSON: And from what I recall from what's in the report it's that the process was relatively consistent over time and so despite the fact that samples are

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separated by a period of 15 years there's a sense that there weren't process changes.

DR. MAURO: Your recollection is I wish I could say that I better than mine. could -- we could probably get our hands on it because I remember the summary page where we have the criteria, we summarize each one. That may very well have been some of the language I'm sure that the language itself in there. is relatively brief. The summary level at the end of the report. If we could bring it up maybe it's even possible to show it on the screen, each of the -- our findings and the rationale why we felt they met the exclusivity requirement. That had to do with percentile, the impact. And then the second one had to do with timeliness and I remember coming out favorably but it wouldn't hurt to just take a look at that if it's possible to just grab it.

CHAIRMAN MELIUS: If you let me get a word in I can point out where it is.

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1	Page 5 of 7, sort of the middle of the page
2	there. I don't think it's, I'm not sure if
3	putting it up is even necessary. I mean, the
4	process is slag handling, and slag handling is
5	I think unlikely to have changed significantly
6	over that time period. I think that's and
7	that's the rationale that's stated in the SC&A
8	report. I actually had the same question so I
9	had to look back to the report while we were
10	talking earlier.
11	DR. MAURO: Thanks for helping me
12	out on that.
13	CHAIRMAN MELIUS: Which is why I
14	had it up, because I think it is an important
15	question that came up. Jim, did you have a
16	comment?
17	DR. NETON: I was just going to
18	read from the report that the surrogate data
19	used for the natural right dumping operations
20	collected between 1947 and '59. So all the
21	surrogate data was in that time frame. And I
22	forget the years now that Hooker is under

1	review for but it's in that same.
2	CHAIRMAN MELIUS: Okay. Any
3	additional questions? If not then I'd like to
4	hear from the is the petitioner still on
5	the line and wish to make comments?
6	MS. GIRARDO: Yes, I'm here.
7	CHAIRMAN MELIUS: Okay. Go ahead.
8	If you have any comments to make now you may.
9	MS. GIRARDO: Okay. Who am I
LO	talking to?
11	CHAIRMAN MELIUS: This is Dr.
L2	Melius and the whole Board, and to the
L3	audience.
L4	MS. GIRARDO: Okay. I have
L5	several items that I wanted to read off here.
L6	Item 1, before the Board makes any decision
L7	regarding Hooker Electrochemical Corp.,
L8	petitioners request an extension of time since
L9	the request to Freedom of Information has not
20	been answered. This extension would include
21	time to receive and time to digest the

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material.

Even though the petitioners were contacted by the federal advocate inquiring into this request, they are not throwing in the towel and feel justified in needing this extension. They also question whether anyone besides a Freedom of Information officer has the right to call the petitioner. The petitioners further add that they object to being contacted and cross examined.

Item 2, on the matter Ordnance Works in Lewiston, New York, would the Board reconsider these points? The Hooker workers went to the "dump" location on orders from their employer. Therefore, they were not Ordnance Works employees, but Hooker's since their salaries were supplied by Hooker. should not be treated as outside contractors since they themselves did not receive any pay directly from another employer. Therefore, since Hooker sent them there and they were working for Hooker, the Lewiston site becomes a Hooker location and since this SEC includes

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all locations, then it should be retroactively approved to the date of the SEC in Lewiston. The Board might also want to ponder the fact that nowhere in the United States could a comparable "dump" site be found. That is amazing.

Item 3, keeping in mind, that Mallinckrodt does not fit the description of a company that is near, would the Board give serious consideration to this question? If the documents for Mallinckrodt were found to be spurious in regard to thorium, then can the Board be sure beyond a shadow of a doubt that the Mallinckrodt documents on uranium can validly and justifiably be used in judging Hooker Electrochemical Company?

4, would the Board also Item consider that three companies have mentioned throughout this decision-making Hooker regarding Electrochemical process Corporation, namely, Electromet, Fernald and Mallinckrodt. However, the Work Group seems

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to have focused only on Mallinckrodt and the other two companies were still being debated when the Work Group made their decision. This does not serve the petitioners of Hooker Electrochemical Corporation in a just manner.

This also does, in fact, invalidate the Work Group's recommendation for denial of the SEC because a judgment was made before all the evidence was in. According to the history of "surrogate data," a minimum of three companies was chosen to strengthen the validity of the comparison. Now, if eliminate two of those companies and just use invalidated the one, you have "surrogate So as a further illustration, using a company that could not be trusted in one regard only opens the door to suspicion of any comparison if you insist on using that same company, namely Mallinckrodt.

You also must remember that Fernald was questionable in its practices. Ethics must play a role in the selection of

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candidates for "surrogate data." And the Hooker Electrochemical Corporation in this case, the use of these three companies as "surrogate data" is certainly suspect.

5. asked for Item When an explanation during the last Work Group teleconference of SC&A about their report on the 95 percentile, the answer given was that although their figure differed from those of NIOSH, they conceded to NIOSH since it more favorable to believed to be the The petitioner asked, "In what way claimant. it favorable, SEC was more dose reconstruction?" The dose answer was reconstruction. The petitioner balked at that and left the conference knowing that SEC is more favorable to the claimant than dose reconstruction.

Item 6. The petitioners have been made to know that they are dealing with scientists who cannot fathom anything beyond formulas, statistics, or in a word anything

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that is not quantitative. In addition, the petitioners remind the Board that the author of the 10-Year Review for NIOSH points out how to the petitioners NIOSH is looked at as an enemy. To the reader of the 10-Year Review only one statement sums up the whole study and it is this: NIOSH, you have done some things okay, but all in all, you could have done a better job.

What has also sadly come to the attention of the petitioner is that there is distinct possibility the that Electrochemical Corporation is being set up as a test case for all future companies coming under review for this program and that is probably the "real" reason for the obvious rush to close by the Work Group as defined -and the Board -- back up a little bit. is probably the real reason for the obvious rush to close by the Work Group and the Board, not the loss of "freshness" to the memory of Work Group as defined by the federal the

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1	advocate regarding the Freedom of Information
2	inquiry.
3	Now we the petitioners hope that
4	you are all better than all of that and we
5	leave you with these words entitled, "The Rule
6	of Three."
7	If one is good, why look for
8	three?
9	This is the current baffling
10	mystery!
11	Who says "surrogate data" is the
12	way to go?
13	Not those who are really in the
14	know!
15	Compensatory programs must be free
16	of this numerical "Rule of Three."
17	These scientists, as great as they
18	are,
19	From simple math have gone too
20	far.
21	
22	Three locations minus two
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1	An equation of one, can't be true!
2	The example given was very clear.
3	Surrogates' locality must be
4	reasonably near.
5	
6	Searching the country is a ploy
7	Leading to what can only annoy.
8	Surrogate data must have very
9	clear specifics,
10	Not the generality of mathematical
11	hieroglyphics.
12	
13	Can't all of you truthfully see
14	Surrogate data isn't what it used
15	to be?
16	
17	What is needed is a clear recipe,
18	Listing steps as one, two, three.
19	
20	Surrogate data's original true
21	design
22	Did not have compensatory programs
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1	in mind.
2	This has been made very clear.
3	Seeing an injustice leads to fear.
4	
5	Realistically, the Surrogate Data
6	use
7	Has resulted in a sad abuse.
8	The question is why the need was
9	seen
10	Especially when "no records" was
11	the theme?
12	
13	What is the real truth behind this
14	obstruction?
15	Is it only to satisfy the "lovers"
16	of dose reconstruction!
17	I want to thank all of you for the
18	attention you've given me this afternoon, and
19	even though we are still in the season of
20	Advent, on behalf of the petitioners I'd
21	sincerely like to extend to all of you a
22	Christmas wish that God will grant all of you

1	the promises that the birth of Christ holds
2	remembering that they are solely for men of
3	good will. Thank you.
4	MR. KATZ: Mary, hi, this is Ted
5	Katz. Before I imagine you'll hang in with
6	us but if you would, it sounds like you might
7	have had a written statement there. And while
8	we could all hear you here it took a lot of
9	concentration and I wonder if you wouldn't
10	mind for the court reporter's sake in
11	particular sending me your written statement
12	if you indeed have it written down?
13	MS. GIRARDO: Yes, it is. I'm all
14	set to go and good old Josh there will receive
15	it by email.
16	MR. KATZ: Thank you. If you just
17	email it to me, Mary, that would be great. I
18	think you have my email address. Ted Katz.
19	Thanks.
20	MS. GIRARDO: No, I don't, but I
21	can send it to Josh and he can forward it to
22	you.

1	MR. KATZ: Okay, that'll work too.
2	Thank you.
3	MS. GIRARDO: Pardon me?
4	MR. KATZ: That'll work too.
5	That'll be great, Mary. If you send it to
6	Josh he'll get it to me. Thank you.
7	MS. GIRARDO: Yes, I appreciate
8	that you realize it took concentration.
9	CHAIRMAN MELIUS: Thanks. Okay,
LO	Board Members. Questions or further
L1	questions? Comments? Yes, Paul. We will. I
L2	was going to sort of first, I was going to
L3	see if there was any other questions about
L4	that came up. Yes.
L5	MEMBER CLAWSON: I guess, you know
L6	I realize we have to use surrogate data and
L7	we've had high debates over surrogate data.
L8	But the thing that bothers me about Hooker a
L9	little bit is how much data do you have?
20	According to the paperwork there, zero. Is
21	there any air sampling data from them or

bioassay from Hooker? So it's zippo. And I

understand, I just really have a hard time using surrogate data from a site, three sites actually that are in question, in my mind in question. I just, that to me is using, you know, you can use as much information as you want but if it's no good. Just wondering.

MEMBER ANDERSON: I think the, I mean that's part of the issue. And what we tried to do was use the criteria that we set up to see. And the criteria don't really say have you have to some measurements facility This something at all. at а basically was just a, you know, a fairly simple process of moving stuff through and dissolving it and then filtering it out and re-bagging it so the process was very similar at these things. I think as a committee when we looked at it, it was kind of, of all the possible surrogate data uses that the committee has looked at this seemed to be the closest to the measurements are of activities that are performed at all of these various

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facilities rather than trying to use some others. So it's about as good as you can get but the fact that there are no measurements from the facility at least as I understand it at all, that, you know, again that is an issue. But we don't have any indication that anything here was done differently. But again, nobody was there to say yes, this is —they didn't move from here to Fernald for instance to say oh yes, we did it the same.

So it's a conundrum as to if it's, the data is now relatively robust, the estimates are upper bound so what do we want to do. That's basically, we're three of us and we're asking the rest of you to weigh in. I think we were a little uneasy with it as well but it's, we came down on the side of using this data. If you agree to use the data then it follows that you'd have to, you know, reject the SEC.

MEMBER CLAWSON: And Henry, I understand your point. I understand your

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conundrum too. I just, my personal feeling is
I thought the reason we had SECs if we had
insufficient data, this is why SECs were put
in. That's my conundrum.

CHAIRMAN MELIUS: No, SECs put in if we're unable to do dose reconstruction with sufficient accuracy and I think that's, yes. There are sites where there's lots of data as we know and it does not lend itself. So that's not the it is criteria. You know, obviously one factor in that but it's sort of keeping in mind. And I think also as a Board we voted to, you know, use surrogate data in, you know, certain criteria. In looking this over I tend to agree with Henry and the Work Group, this is certainly a simple enough operation and a straightforward enough use that I'm comfortable with it. Jim Lockey?

MEMBER LOCKEY: Ted, make sure I can comment on this. But on slide 13, the Thurber memo, what I was really looking at was

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1	the 95 percent confidence level and how
2	assured you were of that boundary. It seemed
3	like from that memo that no matter what
4	technique you were using that was going to be
5	a bounding dose. Am I interpreting that
6	right?
7	MEMBER ANDERSON: Yes. I mean,
8	you've got a range but
9	MEMBER LOCKEY: But that is
10	MEMBER ANDERSON: the
11	distributions when you get out to the 95th is
12	not much difference. Because the ones that
13	stay in in all of the analyses, the high ones
14	stay there so you're not eliminating enough
15	that it really weights it.
16	MEMBER LOCKEY: But if you use
17	different technical judgments it is still
18	going to be found it wasn't
19	MEMBER ANDERSON: Yes, I mean you
20	go NIOSH and they haven't changed their
21	position said to use 18 samples now. I
22	think four of those samples SC&A thought well,

those really aren't what some of these guys may be doing so they took them out when they did theirs and then they added in a great deal larger numbers because I think our committee looking at well, sort of what's was smallest. You can calculate a 95 percent confidence interval around 3 points but you know, those statistics are pretty flexible at that time. So whether you use 67 samples or 18, the number, the 95th percentile you know moved a little but not much and I think we stayed with NIOSH's because theirs actually little bit higher, not because was a thought it was a more robust approach.

CHAIRMAN MELIUS: Anybody else have -- I think there are two reasons that have been put forward for possibly delaying this again so I wanted to talk about this before we move forward. I think the first issue was the one, well, we have not finished our review of the data that's being, the sites from which the data is being used, you know,

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the surrogate data comes from, particularly Fernald. And I think the question is whether that is, is it necessary to weight. It's not something that's likely to happen very soon given all the work that the Fernald Work Group has, and other issues on the SEC that the Fernald Work Group has to deal with so it would mean a substantial delay. And I just don't know if people had thoughts or comments on that, or think strongly we should delay or should not delay? Wanda?

MEMBER MUNN: There appears to be no extreme reason for us to delay for that particular purpose. If we postpone each one of especially these AWEs that come to us based on the assumption that we haven't completed some similar kind of activity or some related activity at the larger site then we could just push everything the back-burner and to nobody's going to be happy with that. there's close not appear that enough association that it would be necessary for us

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1	to postpone for that specific reason.
2	CHAIRMAN MELIUS: Thank you.
3	Josie?
4	MEMBER BEACH: Well, I would argue
5	the opposite. There's an awful lot of data
6	from Fernald being used for this surrogate
7	data I believe. The biggest share of it is
8	from Fernald, 95 percent. So didn't the
9	petitioner also ask us to delay?
10	CHAIRMAN MELIUS: For a number of
11	reasons. I'm going through
12	MEMBER BEACH: Okay, so
13	CHAIRMAN MELIUS: the reasons
14	that have come out one at a time so we can
15	MEMBER BEACH: So there's my
16	reason for Fernald, 95 percent.
17	CHAIRMAN MELIUS: Anybody else
18	want to?
19	MEMBER ANDERSON: The only thing,
20	if we do on the Fernald I guess we need to
21	then have a strategy for how do you go about
22	validating that data. You can't ignore the

affidavit that came in, that's a concern, so
you either have to say any concern like that
means the data is gone or shouldn't be used,
or we do like here and say well, in this
particular instance, this type of air sample
data is, it's consistent with the other data
and therefore it's appropriate to be used. But
we need a there needs to be some decision
because we can't make the affidavit go away so
you're always going to have that question
there. It's only a matter of does it apply to
these, you know, 16 or the broader number of
samples as well. But there is consistency, I
mean, within the Fernald data it's pretty
consistent whether you'll be using the smaller
number of samples or the larger number. So
there don't seem to be any major outliers
there but it's how are we going to resolve
that and maybe we just need to have more time
with the Board to decide on, you know,
expanding our surrogate data use thing to do
you need to have different criteria to be

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CHAIRMAN MELIUS: I would just add that also keep in mind that none of our are final. decisions There's always information that can come forward and I expect we'll have surprises all sorts of ways down the road. Because as we know, even finding documents is not by far a perfect process as we go along here. So there is opportunity for these decisions to be reopened. And so I think that is something to keep in mind that you know, should, whenever the Fernald data or some other thing gets reviewed and reopened then there's a different finding then the implications of that for other sites would be looked at and could be addressed. Paul, you had a comment too?

MEMBER ZIEMER: Well, Mark has addressed how that was looked at as far as Fernald but I just wanted to sort of reinforce one thing. And that is the implication that a survey person would be sent back to get a

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better result is perhaps misleading. And I've
had many cases like this. If I have a, when I
was active doing this if I had a person who
came in with a high sample I would always send
them back for re-sampling because you want to
number one, confirm that and number two,
figure out where it's coming from. So
multiple samples of a high reading above some
limit is very common. The other part of that
I think Mark pointed to was there's no
indication that these high samples were
removed from the distribution that was used.
So in my mind the pedigree of the data is not
in question. I don't know if the Fernald
group will be looking at this data. Otherwise,
do we need it for anything else? I'm on the
Fernald Group and I don't remember that we
actually need this.

MEMBER CLAWSON: Well, this is what I wanted to bring up, Paul. As you said there's no data showing that this data that was recovered was removed, but there's nothing

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showing that it was also left in there. The question with the data comes up to is also it's not uncommon to go out there and get a high result but in the deposition I believe that it mentioned that -- he was to get one that was in order. The question of the whole air sampling data was in question so the Fernald Work Group, we have not looked at that because we are not going to use it.

MEMBER ZIEMER: Right, that's why
I was asking who was really going to examine
this. Would it be Fernald or?

MEMBER CLAWSON: I understand the Work Group's -- all I wanted is the Fernald Work Group Chair to let people realize that we not using the air sampling data Fernald. So we have not dug into it verifying its validity or anything else like that. We early on shut it off because we went urinalysis with the because that's Fernald had very good.

CHAIRMAN MELIUS: The second issue

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that's been brought up in terms of delaying
this would be is the issue of the Freedom
of Information request which my understanding
is it will take a significant amount of time
before that is addressed. I think while the
Board, I think Henry stated this also is that
while the Board has we have a precedent of,
in situations where there are new technical
documents or new information relevant to a
petition being we've delayed action on. As
far as I recall we have never delayed it for
sort of a broad data request, particularly one
dealing with emails and other information, not
for technical documents. Personally I think
those are different situations in terms of
process and how we go about it. But I don't
know if other people have comments or thoughts
on that? If not I think we need to at least
try to bring some closure today and looking
for, I guess we really have a motion.

MEMBER ANDERSON: You have a motion.

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1	CHAIRMAN MELIUS: Yes. Action on?
2	I think if anybody wants delay they can offer
3	that as a motion but if not I think we should
4	proceed to vote. The motion would be to
5	accept NIOSH's findings and to basically turn
6	down the SEC petition at this time. If no
7	further discussion then, Ted, do you want to
8	call the roll?
9	MR. KATZ: Okay. Excuse me?
10	MEMBER FIELD: What are we voting
11	on?
12	MR. KATZ: We're voting on a
13	motion to accept the NIOSH recommendation that
14	the Class should not be added, that dose
15	reconstruction can be done.
16	MR. KATZ: So, Dr. Anderson.
17	MEMBER ANDERSON: Yes.
18	MR. KATZ: Ms. Beach.
19	MEMBER BEACH: No.
20	MR. KATZ: Mr. Clawson.
21	MEMBER CLAWSON: No.
22	MR. KATZ: Dr. Field.

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1	MEMBER FIELD: Yes.
2	MR. KATZ: Just going to check on
3	the phone, Mr. Gibson. Mike, are you on the
4	line?
5	Okay, he is absent and the Board's
6	policy is all absent Members we collect their
7	vote after the fact.
8	Mr. Griffon, are you on the line?
9	Absent. And Dr. Lemen is not
10	available, I believe, I know that.
11	Dr. Lockey?
12	MEMBER LOCKEY: Yes.
13	MR. KATZ: Dr. Melius.
14	CHAIRMAN MELIUS: Yes.
15	MR. KATZ: Ms. Munn.
16	MEMBER MUNN: Yes.
17	MR. KATZ: Dr. Poston.
18	MEMBER POSTON: Yes.
19	MR. KATZ: Dr. Richardson.
20	MEMBER RICHARDSON. Yes
21	MR. KATZ: Dr. Roessler.
22	MEMBER ROESSLER: Yes.

MR. KATZ: Mr. Schofield.

MEMBER SCHOFIELD: No.

MR. KATZ: Dr. Ziemer.

MEMBER ZIEMER: Yes.

MR. KATZ: So this action won't be complete until we collect the absentee votes but the motion will pass because it has nine yeas. So the motion does pass.

CHAIRMAN MELIUS: Okay. Next on the agenda, Stu, there you are. Now we're going to switch to doing the NIOSH 10-Year I will say that we will need to stop this discussion right at 3:15 because we do have a presentation on the Weldon Spring and the petitioner is going to be on the line. think we should try to say that -- and we will pick up on further discussion or questions, I'm not sure either -- depending on how we do with Weldon Spring or we'll pick tomorrow during our various times for Work Group discussions. Because I think this is important but.

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MR. HINNEFELD: Thank you, Dr. Ziemer, and thank you to the Board for -- I just flashed back three or four years --

CHAIRMAN MELIUS: Go ahead, Mr. Elliott.

(Laughter.)

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MR. HINNEFELD: You can always count on me for comic relief. Thank you, Dr. Melius, and thank you the for to Board agreeing to talk about this. This is, our 10-Year Program Review is a process that's been going on for, I guess we started almost two of in terms t.he actual years ago now announcement that this was going to happen. And so then there was an investigation by a series of investigators sort of evaluating how we have done and they provided some pretty thoughtful and careful and helpful suggestions that we are struggling to implement, or we are It's not so much a working to implement. struggle as it's just work and of course we have jobs anyway so this is additive to what

trying to accomplish and keep research and the dose reconstruction process moving and the SEC processes and all that. But think that there's some very key interactions and key relationships very between the 10-Year Review objectives, what we're trying to accomplish in terms of our process improvements and the Board's action and the Board's oversight of the program. So I think there's some very key interactions here that I hope we can take advantage of in our work with the Board going forward.

Just to refresh everybody's memory the 10-Year Program Review was presented in a series of five review reports on the topics of dose reconstruction, quality of science, timeliness of programs and program products, SEC petitions and quality of science. All these reports are still available through our website. They're not actually posted on our website but from our website there's a link to the docket where all these reports are and

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there is a sixth report which is sort of a summary of priority recommendations.

That sixth report was prepared by NIOSH management and it is an attempt to identify what are considered the priority items and priority items to work on from those five reports. I believe all six of those reports were included on your memory stick for this meeting.

I'm going to go through these in a slightly different order than what they're listed here just for convenience of my presentation. The first area I want to talk about is quality of service and this relates to how well are we providing information to and listening to information from our claimant community and the advocate community.

This kind of, this particular area of review and this particular question sort of rang true with me about the time this review started getting going when ANWAG posted on their website a summary of a poll that they

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had done of people who had been affected by this program in some way. And there were a lot of findings on there and some of them were about the Department of Labor's part, some of them were about our part, some you couldn't really tell for sure which agency had caused the reaction of the claimant.

But there was а clear message throughout that that certainly in our, ones that pertained to our interactions and the that sort of ones were not identifiable, and the clear message was that people don't think that we listen to them and when we talk to them they can't understand us.

So to me that said a lot about what is it, you know, about some things that we need to improve. And so the quality of service findings in the 10-Year Program Review very much mirror those kinds of messages, that our communications to people is not done in a way that people can understand very well and that we do not, the claimants believe we don't

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listen to them, so we are not communicating well enough with them. Maybe we're not listening well enough. Maybe we're listening better than they think and we just don't reinforce back to them that we heard what they said.

So, anyway, along these lines there were several issues or groupings of issues that we've been asked to look at from quality of service standpoint. One of those is related to our use of customer-supplied being information, that claimants advocates. And to start that we figured we better inventory the various ways that we hear from our customers and there are a lot. are a lot of routine ways we hear from our customers. We have routine passive communication vehicles where our website is open and people can write to our website. They can send comments to the docket. The more active ones, we go out to worker outreach meetings and try to obtain input from them or

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explain to them what we're doing. We go to
the Joint Worker Outreach with the Department
of Energy and Department of Labor. We are now
capturing and cataloguing the comments that
are made to this body in public comment. And
so we are now trying to build a system where
we will have all these comments obtainable and
that we are making sure that we are gathering
the comments, dispositioning the comments in
some fashion, you know, the ones that require
response. We get a response and then we'll
have to work out a way for how to make those
responses available so that people know that
we are getting back to them. It may be a
mixture of direct communication to the
commenter and postings of things for instance
said in this meeting, or however we wanted to
deal with those.

With respect to issues related to understandability of information, we've done quite a lot of work on this and we are continuing to do more because there's so much

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to do. We write so many communication
vehicles from routine communication vehicles
about dose reconstruction that we include in
the packet that we send to new claimants to
the information on our website which is really
what's getting the bulk of the work right now
on to the letters we send to petitioners and
the letters we attach to SEC documentation. We
have in fact rewritten some of the SEC routine
documents and have managed to reduce the
readability scale as determined by this little
piece of software in Microsoft Word from about
14 to 16 years of education down to about 12
years of education for the ones we've done. So
that's what we're trying to accomplish is to
make the readability of these documents
somewhat easier. We really feel like we
should be writing for no higher than a high
school graduate if we can. One of the things
that work against us is reconstruction has
four syllables and the number of syllables per
word increases your readability scale in these

software. So we do have a little bit of an uphill battle on some of these things.

And then access to information, we are engaged in a project to aggressively put on our website Work Group products so that people who participate in our Work Groups can understand the documents or see the documents at least that are being discussed. I'm sure it's hard enough to follow along with our discussions at Work Groups but if you can't even see the document that's being discussed you really don't have a hope. So we're trying to do that and we're trying to get up there the products from the various reviews that SC&A and the various Work Groups have done of our work to make sure those are available and available to the public. So this is, all these things are ongoing projects in order to try to arrive at a system that we can envision but have not accomplished yet. Before I move off that is there anything anybody wants to say in this area? Okay.

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Timeliness of the five is the one
that we feel like we're probably in the best
shape in. The recommendations had to do with
maintaining a high priority on an aggressive,
well a high priority for DOL returns. The
reason for that is that a person whose dose
reconstruction is returned to us has already
been in the system once, had to go through the
dose reconstruction process, has been in it
that long and then their case is returned to
us because of an additional cancer or
something and they're back in the system
again. And they view their involvement with
the process from the time they filed until now
until they get their answer. So we place a
higher priority on DOL returns and try to get
those out more quickly than for instance new
claims. We also continue to adopt aggressive
timeliness objectives for dose reconstruction.

Certainly we are now striving to get them all out within nine months of when we first receive it and a much shorter time from

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when we have all the information available because the first part of the process on a claim is to get more information usually from the Department of Energy. So we are -- and we do that, both of those objectives we carry forward into the award fee criteria for our dose reconstruction contractor and those are updated every six months. So as we make progress we can continue to look for more aggressive objectives in the future.

The final one is aggressive time limits for the completion of the review of SEC petitions is a recommendation that we're going to struggle with a lot. We certainly already attempt to prepare our Evaluation Reports in the 180 days when at all possible and the review of course is a Board function. It depends upon our ability to provide additional information quickly as well as SC&A's and so that's a very complicated one. I think it may be that the Board may or may not want to consider whether it wants to have suggestions

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about that.

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There is, and I list it in that order because there is a third group, the third report is about SEC petitions. And so the timeliness on SEC petitions is probably better thought of in the SEC petition grouping of recommendation.

thing Ι meant to mention awhile ago when I was talking about quality of service is that many of these communication, the clarity of our communication and are we listening to our claimants, to our customers. Those are the kinds of questions that the Worker Outreach Work Group is and has been addressing and continues to address. along those lines I think that that piece of work, the 10-Year Review piece of work program in that area is a good source of material for the Worker Outreach Work Group to take up and say okay, in conjunction with this Work Group then can we move forward and does the Work Group want to do that.

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Of course the Work Group will do what it wants, it's just a suggestion on my part that these activities we expect to engage us for awhile and we would certainly rather have the Advisory Board participate to the extent that they want, the Work Group participate to the extent that they want, for instance commenting on interim products. Maybe it's as easy as that, just, we have an interim product, a draft product, have the Work Group look at it then. I would rather have them look at it then and provide recommendations in all durations in course while we're preparing than to bring forth the full-fledged product and then have the Advisory Board at that point ask questions about well, why didn't you do this and this and this. So it would be much fulfilling easier, much more from our standpoint if we could at least get feedback from the various Work Groups as we go through these processes.

With respect to SEC petitions of

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course again there is an SEC Petition Work
Group and so there is a Board structure that
is set up to provide that same sort of
interaction assistance to us in the SEC
petition recommendation. For those of us in
the trenches these are probably some of the
more difficult of the recommendations to get
our heads around because they speak of things
that we don't necessarily speak of in terms of
dividing policy and science. We tend to think
of questions that come before us as science
questions and the reviewers view is that, you
know, in very many cases these decisions that
are presented and addressed as science issues,
you know, science really can't provide you the
answer for, that the answer is going to be the
result of a policy and what policy do you
choose to guide you in certain circumstances.
So the recommendation really was to think in
those terms of what is it that science can
inform us about and what is it that a policy
has to provide our path. And so, and

specifically speak in those fashions. this whole discussion, I don't know if this is -- to show you how confused I am I don't know if this is a science question or a policy you deal question is that when with particular issue like thorium you should talk about the evolution and the context of why thorium now, why this thorium in the context of other thorium decisions you have made about reconstructability, why are you reaching this decision now in the context of other decisions along that same type of situation. I just use thorium by chance, it doesn't have to be a radionuclide-specific sort of question. So that's one thing is to kind of, you know, what determination you're making now and how does that fit in the context of other decisions.

And part of this is also to write a policy memo which sort of describes, okay, we've done the science, it took us so far but here are the various policy positions that are being proposed in order to reach the

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conclusion that we reached. So it has to do with that, speaking of some questions as policy questions and others as science questions.

large bullet The second there, work to define sufficient accuracy is course very difficult. If we could have done that easily we would have done it when we wrote the regulation. I think our best approach there is to use the history of the program so far. We've got, what, eight years worth of history of SEC. I forget exactly when the regulation was published. And so, there have been quite a number and of decisions made to add SECs or not to add SECs and so it's kind of a, for lack of a better term a case law study here to determine what is it, you know, what are the kinds of situations and is there some way that we can use the precedents that have been reached so far in order to work on a series of statements about what does it mean to be sufficiently

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accurate. So that again is quite a difficult one. We're not terribly far down the road on that.

final has to do with The one utilizing people other than, like, different than me to deal with some of these questions because the -- and I may be part of the contributing factor to why this ended up in It's my experience as a health the report. physicist that most of the times career you're given a set of data and you're told, you know, what's the answer and so you write down a set of assumptions and you say And it's not, you're not here's my answer. normally given the option to say, you know, there's not sufficiency grade а or sufficiently accurate grade on my answer. Т gave you all my assumptions so based on those assumptions these are my answers and so you just provide an answer, you know. give you a sufficiently accurate answer normally one of the things in the vernacular,

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it's not one of the options when you were given the assignment. So there's a sort of professional, you know.

So what we were trying to guard against or what we want to guard against, I'm not exactly sure how to do this since we're mainly health physicists in DCAS is to quard that particular orientation, against professional orientation to provide an answer, you know, rather than to opt out, to say there is no sufficiently accurate answer here. we are hopeful, you know, to find additional resources that we can utilize within the Institute probably on an assignment. I don't think we'd like to do a big hiring move in DCAS but maybe on an as-assignment as we move forward to utilize some additional resources for questions like that. Before I move on. said earlier, there is SEC Petition Work Group so these types οf questions and the kinds of interaction I described earlier would serve us well I think

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if we could work through this with the SEC Petition Work Group.

The quality of science findings, a Scientific again, there is Issues The Scientific Issues Work Group can Group. choose to take these things up or not I think, it would depend on what they want to do. would probably provide helpful guidance to us to see feedback at some points along the way rather than wait until the end. But one of the items was that as a general rule we don't get peer review on very many of the documents we publish. We do get some expert review for questions such as should CLL be a covered cancer, things like that, but we haven't -but as a general rule we don't get peer review like a journal article gets peer review on the documents that we write.

We're not entirely sure ourselves that everything we write really warrants peer review but we think there probably may be a category of things that we would want to put

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in that category of maybe this needs some other review, some peer review besides just those of us in the program. And so what we intend to do is try to develop some guidance to sort of identify at what point, what kinds of things do you want to get peer reviewed. I'm going to look at Jim on this because if I say anything wrong I think he's going to hit me with his shoe or something.

(Laughter.)

The second item MR. HINNEFELD: to assess validity of indirect exposure methods. Now, one the, of course, indirect exposure methods is coworker use of -- use of coworker method. We are in fact starting on a trial run validation using Savannah River Site. That's the site that we feel like there is sufficient data from other programs and uses have been done elsewhere that lend itself to testing our coworker approach against the Savannah River, using the Savannah River as an So we're going to start there. example.

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possible if we can identify additional sites where we have sufficient other, you know, outside data uses of it that would allow us to do the validity we might do those as well. But we're going to try to do that, something along those lines to test validity of indirect exposure methods.

And I characterized the degree of claimant favorability in our current methods. We talk about how claimant-favorable we are really quantify it but never say than well, it's anything other claimantfavorable. And so from this standpoint we of take hope to sort an inventory of approaches that we consider claimant-favorable and I believe there was а Health Physics Journal article published a few years ago that kind of talks about various things that are in dose reconstruction that seemed to be favorable and we'll see if we can't in some fashion do some sort of comparison of that, the approaches described there to approach

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that in maybe a more -- that might be used in other programs, whatever that might be.

We were specifically asked to evaluate the utility of the EPA surrogate data protocol which is relevant to surrogate data usage.

We've taken a preliminary, next bullet, NIOSH Review, that's supposed to be small. It's not supposed to be the same level, it's supposed to be a sub-bullet to the Utility Evaluate Of. Our preliminary evaluation is that it doesn't seem to be, you know, the criteria in that doesn't seem to be all that dissimilar from IG-004 but we are continuing to review and we're asking non-DCAS reviewers, I'm not sure they're all non-NIOSH but we're going to ask non-DCAS reviewers including non-health physicists to make a read of that EPA document and see how they feel that compares to how we're doing things. course they're going to have to learn how we do things too.

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I think we've already arranged some industrial hygienists to start after the first of the year as one of the people looking at that because the EPA surrogate protocol isn't specific to radiation. In fact, it's mainly about other toxins, not about radiation.

And then the final topic from the Review 10-Year document the dose was reconstruction topic. And one of the recommendations was directly to work with the Subcommittee on dose reconstruction reviews on the QA/QC evaluation. So we really are hoping Subcommittee. work with the The to Subcommittee had already taken up the issue of dose reconstruction quality. I think if the Dose Reconstruction Subcommittee Members when they read this report probably said gee whiz, we've already said all that because I think a great deal of this 10-Year Review report on QA of dose reconstruction actually came from the Dose Reconstruction Subcommittee. And we have

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fact in discussed at the last Dose Reconstruction Subcommittee meeting some actions associated with the dose planned reconstruction quality. From that meeting of the Dose Reconstruction Subcommittee there was the suggestion that gee, there ought to be some sort of duplicate analysis program, sort of ongoing duplicate analysis program so that you have some ongoing measure of the quality of dose reconstruction. So there were a number of suggestions at that Subcommittee meeting about how that might be accomplished.

The one that we hit upon that we thought that we can do given the availability of people with sufficient breadth of knowledge and also maintaining at least some sort of blindness to the test, some sort of blind test is a duplicate dose reconstruction where we will select claims that we will do a dose reconstruction for in DCAS.

These will be claims that the actual project's dose reconstruction will be

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done by our contractor. The contractor will not know what claims we select. They'll work these claims as they would normally work them and then once they have delivered them we will compare the two dose reconstructions to see if they are, you know, if they are close together. We don't expect them necessarily to be exactly the same but we would expect that they would be done in the same way and pretty The comparison, we have an idea of how we're going to compare the duplicate to the actual production but until we actually start comparing and see what we see, I mean we've got sort of a checklist of things we're going to check.

It's a little unclear to us exactly what we'll be able to tell from that but I would think we would be able to tell at the very least are the directions consistent and are the directions to dose reconstructors clear because theoretically they should make the same major decisions about how the dose

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reconstruction is done. Because they should be following the same instructions.

Now, this application has started. We have started selecting dose reconstructions and we've started doing the duplicate dose reconstructions. So we're selecting on the order of two a week, roughly 2 percent, that's a popular number for reviews. I think the review did 2 DTRA percent of dose reconstructions, the Advisory Board has a goal to review 2 percent of dose reconstructions. I think we're all basing our 2 percent on the fact that that's what somebody else is doing, so that's what we're doing as well.

CHAIRMAN MELIUS: You mean that's valid then.

(Laughter.)

MR. HINNEFELD: Without a sharp statistical test at the end it's hard to know what your sample size has to be because, you know, you don't have that sharp statistical test that you're performing. So we're pulling

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about, it turns out somewhere about two a week we're pulling and starting to do the dose reconstructions. And last report I had we have not received any of the production dose reconstructions yet of the ones that have been pulled. They will come sometime later.

MEMBER LOCKEY: Is that done randomly?

MR. HINNEFELD: Yes, the computer pulls them out randomly. And in fact we had to build in the ability to reject some because the claims that were pulled, we had a claim that was pulled that for instance falls into what we're trying to add as a Class. And we think there's going to be a Class so that we think that that claim will never get production dose reconstruction. So there's been at least one instance when we rejected the claim that was pulled randomly because we didn't think we would ever get one to compare the duplicate to.

The computer system, the NOCTS

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tracking system which actually, it not only provides, keeps all the files but also all of our work is done on that computer system by clicking buttons. You approve something by clicking a button and that moves it to the next step in the process. That application randomly pulls cases and puts them in a new inbox. This new inbox is for someone to do the duplicate, one of our dose reconstructors or one of our health physicists to do the duplicate dose reconstruction.

The other specific recommendation about dose reconstruction quality from the 10-Year Review was that if there are -- since the Dose Reconstruction Subcommittee continues to find findings of dose reconstructions despite the quality that we try to do on them so far why is that? Why is it that there are findings still found in dose reconstruction review? So to get a handle on that we looked at the five most recently completed cases for which we had a dose -- in the last set of dose

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reconstruction reviews. The last set that was
available to us I think was the twelfth set
that we had to report on when we made this
selection. From the dose reconstructions that
were reviewed in the twelfth set we picked the
five that had the latest completion date for
our dose reconstruction because we wanted to
get the most recent information we could. We
didn't want to start to try to figure this out
on cases that were done eight and nine years
ago. We wanted to do as recently as we could.
And we've looked at those findings and we're
doing analysis of those findings and a
preliminary analysis, our preliminary look at
those has been done to determine was this in
fact a quality error and then the next step,
well then, how did it happen. How did this
occur that despite what we believe is a pretty
careful inspection our quality program,
there's usually inspection for people checking
it, why did that happen. And of course once
you know why it happens then you decide what

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can we do to make it not happen anymore. So we have the preliminary review of those cases. I'm hoping we'll be able to talk about those at the next Dose Reconstruction Subcommittee meeting which I think is the 19th of this month.

And then there's the other issue of should we eliminate overestimating dose This has been discussed in reconstructions. the Dose Reconstruction Subcommittee as well. The problem with overestimating dose reconstruction is that overestimate you somebody's dose, send them you compensable dose reconstruction and they then get another cancer, and it comes back for rework and your overestimating technique that first time with you used the now the additional cancer makes it а compensable claim. You know, overestimating is only supposed to be done for non-compensable claims so now you have to change your approach and take out some of the overestimating you did

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and either do a best estimate or get closer to a best estimate.

And so you have a case where a person had one cancer and got a certain PoC value and then they get a second cancer and they get a lower PoC value. And in our dose reconstruction we say every time, this is an overestimate, if the situation changed a new dose reconstruction has to be done. It may not be as high, you know, may not be as high. But it just doesn't resonate, it just doesn't make any sense to people that they had one cancer and they got this number and they get a second cancer, they got a lower number. Ιt just doesn't make any sense. So there's a recommendation to do away with the process of overestimates in general.

So we did ask our contractor for a cost analysis and it would be extremely expensive not to do dose reconstruction. It would add millions of dollars a year at our current production rate to the cost of -- I'm

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thinking \$2 to \$3 million a year if we didn't do any overestimates at all. We're looking at other things we can do to maybe not do as many overestimates.

pursuing One thing are is we trying to, we wanted to approach the DOE, we haven't quite done this yet so I'm surprising Greg with this, but we gathered the sites, the names of the sites that do not routinely provide us medical exposure information with the personal exposure histories. And so what that does is typically what happens, if we do that we'll say well, if we don't get the exposure, the X-ray information, we will just do a default, assume they got an X-ray every year, include that in the dose reconstruction then it's overestimating claimant-favorable. The default is usually one a year, the Site Profile doesn't specify what default really And so then those are some of these Then we re-work it and we overestimates. write off and ask, you know, well, this is

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getting to close to 50 percent so we write for the actual exposure X-ray information and there are a number of sites who can provide it if you ask specifically for it.

So we intend to approach DOE and say hey, why don't we just get these sites to just all the time as a routine matter send us all the exposure information so we won't have deal with that to and then stop the overestimating part with medical, use actual medical X-ray information. So that's could do to do fewer thing we reconstructions. The other thing overestimates.

The other thing we're considering is to not, you know, the overwhelming number of cases, or the biggest majority of cases that come back are skin cancer cases because very often a person gets a skin cancer, they're going to get additional skin cancers. Maybe just don't overestimate skin cancers. Now, all of these have a cost and that cost,

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the effort we use to move to dose reconstruction so that we don't do all these overestimates, this effort is then subtracted from probably Site Profile finding resolution because we'll try to keep SECs going as much as we can but that delays our ability to remove those SECs.

So the question about how much is it worth and where do you, you know, what decision do you make and how much is it worth to stop doing overestimates comes down to a comparison of what's the impact on the whole So we're really working on kind of program. an entire program long-term look at what we expect work and cost to be, how to think of when we might be in position to do something like that without this huge backlog technical work that I prefer not to pay into, there some things we can do more are cheaply like the medical X-ray. Or some other things I haven't even mentioned that we've thought of that might provide us some relief

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from overestimates at a low cost. So those are what we're looking at there.

Again, this topic has also been in front of the Dose Reconstruction Subcommittee and I think they might want to participate with us as we go along as well I think, as we do this. I think that's the last of my slides, so.

It is. CHAIRMAN MELIUS: We're running to 3:15. What we'll try to do is either come back depending how long Weldon Spring takes at the end of that or, I know you've been a long time without a break, the Board has, or we will certainly take it up probably right after lunch tomorrow questions. I would ask everybody to think about the, you know, I think one way of moving and implementing, helping DCAS to implement these recommendations and help evaluate what to do would be to refer a number of these to Work Groups for follow-up. A simple one is what Stu mentioned with the Worker Outreach

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1	and review of some of the new communication
2	stuff, documents and so forth that would be I
3	think very much in line with them and could be
4	done on a sort of periodic basis as that gets
5	implemented.
6	But I think on a number of these
7	other situations we need to decide how they
8	would work and where is the best Work Group.
9	So if you all think about that also and then
10	when we, after we've had a chance to discuss
11	this some more and then ask Stu some questions
12	we'll maybe try to resolve some of those
13	referrals and so forth. So, Stu if you can.
14	We'll try to keep everything, the slides in
15	mind and if you can be ready for questions and
16	so forth when you come back I think it would
17	be useful.
18	MR. HINNEFELD: I'll be here.
19	CHAIRMAN MELIUS: Okay.
20	MR. HINNEFELD: I'm here all week
21	as they say in the comedy clubs.
22	CHAIRMAN MELIUS: Okay. Thanks

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very much for that. We'll now move along to
the Weldon Spring SEC petition which we'll
have a presentation on. Actually, Mike Gibson
couldn't be here. I'm not sure if Mike's or
the phone but Dr. Lemen was going to do the
presentation. He didn't make it so we've
recruited John Mauro to do sort of the Work
Group presentation I believe is the way we
decided to proceed. We'll hear that, we'll
ask questions. I do believe the petitioners
will be on the line, may want to comment. I
would say up front that as I understand it the
Work Group does not have a recommendation at
this point, there's still some issues to be
resolved. The idea of this presentation is
just to get some of these issues in front of
the full Board and give us an update and then
could be very likely at our next Board meeting
we will be ready to proceed on this. I'm not
sure how tight that schedule is but I think it
sounds right so keep this in mind. That's why
we want to spend a little bit of time on it

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today and we thank John for under some relatively short notice working this out because -- and agreeing to do this. So, John. So when we ask John questions and he hesitates or something remember that he's not, he was a recruit.

DR. MAURO: Good afternoon, this is John Mauro.

CHAIRMAN MELIUS: Let me just interrupt one second.

DR. MAURO: Sure.

CHAIRMAN MELIUS: Again, for these people that are here because of the Pinellas site we will, after this session and we will be taking a break but starting around 4:30 we will start first off with a presentation on Pinellas and the activities there directly followed by the public comment period. If you wish to make public comments it's helpful if you've signed up at the front desk when you come in. It just gives us an order to call on people though it's not -- a little bit more

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informal on that. But we will be doing that starting at around, between 4:30 and 5 so everybody knows that. So go ahead, John.

DR. MAURO: Okay, thank you. Thank you very much, Dr. Melius. I'm John Mauro and I will be preparing this. Ron Buchanan, are you on the line?

DR. BUCHANAN: Yes, I am.

DR. MAURO: Thanks, Ron. Ron has done all the heavy lifting here and he did help prepare these slides. And I'll do my best, I'm fairly close it, been following this pretty closely but certainly Ron will be there to help answer any questions.

The first slide is simply summary of the history of operations at Weldon The most important bullet out of all Spring. of these that we're looking at is the one that says June 1957 to 12/31/1966. That's the time period when there were uranium operations and that's the time period that's consideration for a possible SEC.

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going to be talking about those uranium operations.

This is a sketch of the facility. What's important here is there's a raffinate pit area, an open pit area where there was some potential for exposure and off to the right side is the operations area just to give you a general idea of the layout. You folks may remember we made a visit there one time and this is a photograph of a disposal cell. Some of you may remember we were actually on top of that and took some pictures awhile back. So let me move on.

There's quite a history here. The work that began on Weldon started with the Site Profile in 2005 that was issued and SC&A reviewed the Site Profile. There were 28 issues on the Site Profile that were in place. then an SEC was qualified and in April 2010 there was the Evaluation Report. And then is when the Group activities Work began intensively and there were a series of five

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meetings the last of which was last week. And it turns out I believe there are nine SEC issues and 28 Site Profile issues. The 28 Site Profile issues were tracked. We did our best to keep them in place as we were moving through the nine SEC issues so that when we got through this process we would largely have covered just about everything that needed to be covered.

A lot has been covered and I will briefly identify the nine SEC issues. The first one of course is a classic one that's time, applicable all the accuracy completeness of the internal and external dosimetry data and the degree to which there was sufficient data to build a coworker model. The second issue was egress monitoring. There limited or minimal amount of was monitoring. So these workers leaving the premises and whether or not there may have been some surface contamination of concern. The third issue was it turns out the last year

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of concern here, 1967, there was minimal or lack of records, I think it was a minimal amount of records available to do dose reconstruction so the question becomes how are you going to do dose reconstructions if you have limited data.

Number 4, radon/thoron measurements. There no, there are buildings where uranium and uranium progeny including ore were handled, where radon and boron for thorium were handled so therefore you have radon and thoron becoming airborne within the building and the question is how are you going to reconstruct the doses there. That's what you're going to see later on, that's one of the subjects that I believe that will require a bit of deliberation.

The next is recycled uranium. This issue in many respects was addressed and has been addressed and took advantage of the great deal of work that took place at Fernald. There's an issue related to neutron dose

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reconstruction, we'll talk about that in a
minute, but right now I'm just trying to give
you a sense of the nature of the issues and
then we'll get on to how they were resolved.
There was this outdoor quarry that had the
raffinate pits and there's airborne dust
loadings associated with that. The question
is since there were limited data collected
during the actual operations period but later
on data were collected post '67 and the
question is can you reconstruct doses during
operations period using later data. Accidents
and incidents, how are you going to
reconstruct doses to people who may have been
involved in many of the accidents, the
incidents that occurred at a facility like
this.

And the last one has to do with the doses to extremities. When you don't actually monitor the hands or different parts of the body, how are you going to reconstruct the doses if you only have a film badge

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sitting on your lapel?

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Those are the nine SEC issues and we're going to go over those and how they've been either closed or which ones are still active. There were also 28 Site Profile issues but most of these have been subsumed within, are subsumed within the nine. So we're in, what I would say is we're in a very mature stage of addressing these, not only the nine but also the 28.

getting the Okay, we're now The first issue is the accuracy substance. and completeness of data. Can you reconstruct, do you have adequate data to One of the first issues reconstruct doses? that came up was that, well, there is a CER database that supported epi-related work which is a second order database. And there were some questions regarding whether or not that database was going to be used, and very often there are questions when you work with these electronic databases with secondary data. That

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was resolved because NIOSH has committed to working with the original, what I would call hard copy data, the bioassay data and the film badge data. So that's how that was addressed. And then the question becomes okay, given that you're going to work with the, we'll call it the original data, how do we know the data is complete? Turns out that NIOSH's position on this matter is that they have complete data and that given that they have a richness of data they can do reconstruction, both external and internal. The Work Group tasked SC&A to see if that's true.

So what we went in is grabbed 15 of the operators, people who have in our judgment the greatest potential for exposure, and grabbed those workers and did -- only 15 workers were grabbed so it doesn't sound like much but it's a lot of work to go through each of their records for their entire work history and to see how complete those production workers, I called them operation workers,

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production workers, how complete their data
are, both external and internal. And we found
that it was very complete. So at least for
the sample that we grabbed it validated
NIOSH's position that yes, we have a fairly
complete data set at least based on the sample
that we reviewed and that given that you do
have a fairly complete data set for these
production workers the sense is that if and
when the time came when you needed a coworker
model it could be developed. Let me point out
though that a coworker model has not been
developed and that was of some concern to the
Work Group, not having a coworker model. But
in our last conference call which was last
week we discussed this matter and it's our
understanding that I believe over 200 cases
have already been processed and in none of
those cases was it necessary to resort to a
coworker model. And the outcome of that
conversation was that's pretty strong evidence
that you have fairly complete data but even

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more importantly the survey of the 15 workers implies that if the time comes that you do need to resort to building a coworker model you have the data to do it for the Work Group, the group of workers that appear to have the highest potential for exposure. So on that basis this issue was closed, recommended to be closed.

I went a little ahead of myself, the coworker data I just explained. This is all part of the first major issue. So we concluded that even though there isn't a coworker model, one can be developed if it turns out a case shows up where it might be needed.

Egress monitoring. This is a concern when a worker is leaving a location, you're not surveying him. He could have skin contamination. What are we going to do about that? That is, that he might, a person, for example, you have a case shows up with skin cancer and you want to reconstruct the doses,

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the way in which it's normally done is to go with the film badge data for non-penetrating radiation. But as you know from in the past there are certain kinds of sites, and this is one of them, where there is the potential to have the skin contaminated with a particle.

NIOSH's position is that well, if need be we could use VARSKIN, one of the computer programs, to calculate what the dose is to the skin right beneath the particle but that issue in general is of more an overarching program-wide issue. And therefore it's, at least it's been closed with respect to this matter here before us but I believe and certainly I could stand corrected, believe it's being addressed as part of overarching scientific issue on how do we go about dealing with reconstruction of doses to localized areas of the skin that might have become contaminated by a particle falling on So this is an issue that has been the skin. sort of transferred over to an overarching

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scientific group within NIOSH.

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Recycled uranium. This is issue that as you know came up extensively at And what happened here is the Weldon Fernald. Work Group worked very closely with Fernald Work Group and sort of used the outcome of the work that was being done at help make judgments regarding Fernald to whether or not there was an SEC issue that was intractable here, a problem that was difficult It turns out that the outcome of to manage. this is that yes, there was recycled uranium. The approach that's going to be taken by NIOSH is that they will assume a conservative mix of plutonium at 100 parts per billion. number turns out to be, in our judgment, in judgment, the recommendation is as a SC&A's reasonably bounding value based on the nature of the material that was handled at Weldon and in light of the knowledge we gained from what took place at Fernald. So we felt that this approach that's being adopted by NIOSH for

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recycled uranium at Weldon is appropriate and reasonably bounding.

Neutron data. This was a struggle at first until we realized we were disagreeing for a very interesting reason. The way in which neutron doses are being reconstructed at Weldon is to use the neutron/photon ratio. NIOSH came up with the neutron/photon ratio of 0.23 and we were asked to check that number. And it turns out that the way that number was, that ratio was developed was based on actual measurements taken of neutron field. the way, the way the neutron occurs is from alpha-N reactions. it's amenable So modeling, modeling. NIOSH did MCNP But something better in theory. They had actual measurements of the neutron field, had actual measurements of the photon field and therefore came up with the neutron/photon ratio based on And by the way, this I those measurements. believe came from Fernald. Please confirm. Thanks, John. And however, Yes.

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critical of that approach because they were not paired measurements. And it wasn't that they took the neutron/photon measurements from the same location at the same time, they were taken at different locations at different times. You just can't do that.

So, we went ahead and said what we We went ahead and ran MCNP and came up do. with a neutron/photon ratio of 0.44 which was about twice as high as theirs. saying, you know, what's the problem? it turns out relatively recently we found out that when NIOSH came up with its 0.23 based on these empirical measurements which we were troubled by. We didn't say they were wrong, we just didn't like the method used. We came up with 0.44 but our 0.44 has built into it the ICRP correction factor of 1.91, that's built into -- that you have to use. In other words, once you get the neutron dose you want to convert it to an effective dose, you multiply it by 1.91. We multiplied by 1.91 to

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get our 0.44. NIOSH didn't. They were going
to do it, not that they weren't going to do
it, but when they reported their 0.23 it was -
- so the reality is their intent is, and
please correct me if I'm wrong, to take the
0.23, multiply it by 1.91 and all of a sudder
our numbers agree. So, from our perspective
oh, okay, we didn't realize we were comparing
apples and oranges until it dawned on us that
we had the 1.91 built into our value while
NIOSH didn't. And so as far as we're
concerned notwithstanding the fact that we
don't like the way the 0.23 came about we,
once you multiply it by the 1.91 you get the
same number almost that we get when we ran the
MCNP calculations. So we recommended closing
this item.

The is the next one quarry. had this Outdoors raffinate you you probably they processed uranium know, the uranium. separated You have out the raffinate piled tailings outdoors up and

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there's certainly the potential for people to be exposed to airborne particulates associated with the raffinates outdoors. But there weren't measurements made at the time the raffinates were there from '57 to '67, but there were samples, airborne samples collected later.

We discussed this at length and the judgment was that there's no reason to believe that the airborne dust loadings of particulates, radium, thorium after 1967 were any different before '67. So as a result we felt that yes, here's a case where in fact if anything you're going to you know, have, you've accumulated more and more material. You're going to get the highest potential for airborne exposure sort of at the back end of the process. So we concurred with NIOSH that using later data did not really result in an underestimate of the potential for airborne exposures from those raffinate pits.

Accidents and incidents. The fact

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that they have virtually a fairly complete
database for both external film badge data and
internal data from urinalysis means that
anyone that may have been involved in ar
accident or incident would likely, you know,
we'll have the data and we can reconstruct the
doses associated with those incidences. It's
not that we need to go into and reconstruct
the exposures from the accident. We have the
actual data from every worker. If a worker
has been involved or, this is the argument,
been involved in an accident incident we
always do have the data for this worker. And
as a result there's confidence that the doses
that are being reconstructed for all the
workers, anyone that might have been involved
in an accident or an incident we have the
bioassay data in order to reconstruct their
doses.

Finally, the geometry. A question was well, is it possible that a person's hands or extremities could be experiencing fairly

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high doses but if you didn't monitor the extremities how do you know where those doses were. And the argument was made by NIOSH that we're going to use DCAS 13 which established a relationship between what you would read on a badge and what you might expect your hands to experience. And we review that approach and the, I guess you would call it the adjustment factors to back calculate what the extremity dose may be from the film badge reading you have that's on the lapel. And we concur that that approach works.

Now, I'm going to go back to an issue now, we're going to go back to the issues that are not closed and there are two of them. One is thorium. Weldon worked with thorium-232 and there's no thorium bioassay data but they do have extensive air sampling measurements, I believe over 200 of them, many of which are breathing zone samples. Again we benefit from the experience that we had at Fernald. When you have a very extensive data

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set for breathing zone samples and air sample
in general you could derive daily weighte
exposures. And we, there's a lot of history
to this but the bottom line is that there wer
a lot of problems with the approach being use
originally by NIOSH for doing DWEs all o
which was hashed out under Fernald and in th
end NIOSH adopted a method that we refer to a
Strom. Daniel Strom wrote a paper, how do yo
deal with, how do you derive bounding o
conservative intakes using DWE approach. An
he laid out a protocol that we reviewed ver
carefully, NIOSH reviewed it. NIOSH adopted
simplification of it but met the intent of i
so that when you build a DWE and you assign a
intake you could feel confident that if yo
have a fairly complete data set, you'r
placing a plausible upper bound on the intake
So this is the approach that was adopted a
Fernald. It's also the approach that wa
adopted here. And our review of it is that w
fundamentally agree. Even though it doe

deviate a bit from the Strom approach, we consider it fundamentally sound except for one issue and that has to do with a subject called blunders or errors.

In Strom's original work, he found that there very often could be a problem with when people collect that original data, air sampling data. They may take a two-minute air breathing during sample from a zone operation and another two-minute air sample from another operation and they collect all their data, the raw data you need to derive your DWEs. They found that there very often significant number of transcription was errors, arithmetic errors which contributed to the uncertainty and the trust you could have ultimate intake in the rate that you're deriving using this approach. And so what NIOSH elected to do is say you're right, we have to address that issue. We can't just derive a DWE and say here it is. You know, they went through the mechanics that are laid

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out by their protocol and they said here's our
DWE. But now we're going to go through a
process to work with the original numbers and
see how many blunders were made. And then
once we catch those blunders, because they had
the original data, so they could actually go
in and check on the number of blunders. So
they went in and did it, did this analysis,
and this is relatively recent all this
happened. And they reported back to us last
week that they checked the numbers and found
that they caught the blunders, fixed them,
reran the numbers and found that the by the
way, they worked with the upper 95th
percentile. They found the upper 95th
percentile of the intake for the DWEs would go
up by about 4 percent after the blunders are
corrected.

Now, on face value that sounds pretty good but we had one concern with it. That is the representativeness of the sample that they used to check for blunders. Think

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of it like this. Let's say you've got 100,000
or 10,000 measurements that were the original
measurements used to derive your DWEs. But
available to you is only a subset of the
original data. The original data, the raw
data that went into get the DWEs, only a small
fraction of that. And it's that small
fraction that was available to NIOSH to
actually go back and check how many blunders
there were. Our question was how confident
are we that they had a representative sample
in order to evaluate the nature and extent of
the blunders and how they would affect the
outcome of this calculation. That
conversation was held on the 29th I believe
and SC&A's recommendation at the time was you
know, until we feel confident, SC&A now just
making a recommendation, until we feel
confident that the sample that was used to
evaluate the magnitude and the effect of the
blunders, until we know that or feel confident
that it is representative of the full data set

that was used to derive the DWEs we really can't say that the blunders have been, the issues related to blunders have been adequately addressed.

that's the technical So issue that's still on the table. SC&A has an action We are moving on it as we speak. not, we have Harry Chmelynski and the crew and John Stiver working the problem, and we hope I'm not sure if we have set to get back soon. a date for when we're going to deliver. have not yet set a date. That was just last week. But we'll get back to you soon, give you a date so we could plan around that. now the, let's see. Well, I just covered all these slides in telling my story. Yes, there's nothing new here. Okay.

The last item is an item that SC&A has found acceptable but the Board certainly will want to deliberate on this. This has to do with radon and thoron. It's very similar to the problem and challenge we ran into at

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Blockson with one exception, okay? There's a building, it is handling ore and material that's generating radon and thoron is entering the air such as if we were in this room. You can imagine you have a source of radon or uranium or ore in front of you, let's say it's in that table and radon is being produced continuously. Thoron is being produced continuously and becoming airborne.

When we built the Blockson model we had that material coming up. We assumed a certain fraction had certain а emanation coefficient, a certain fraction was becoming airborne and then once it became airborne it leaving the room with a certain air was exchange rate, a relatively simple box model. As you recall SC&A came away favorably on that. We felt that it was a reasonable way to As you also know the Board said no, go. without any data we're not too comfortable with that. I just want to give you a little history.

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Now, NIOSH has come up with a
similar model but a lot more conservative. In
this case the approach that NIOSH has elected
to use is to assume that all of the radon and
thoron that's being produced by the ore and
other materials that are in the room. By the
way, if I got it wrong let me know. My
understanding is that what they're doing now
is all of the radon and thoron that's being
produced by the source material that's in the
room, it's becoming airborne and it's staying
there more, it's not leaving. A hundred
percent produced is not, is becoming airborne
and not leaving so it builds up so that it
achieves an equilibrium that's based on the
decay rate of the radionuclide, not based on
the air turnover rate. In our opinion this is
an extremely conservative assumption,
certainly bounding because the reality is
there is an air turnover rate, most rooms have
air turnover rates. We talked about this a
lot, but no credit is taken for that, so

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1	they're allowing the radon to build up to what
2	you recall to be the maximum value it could
3	possibly be in that room. Now, from SC&A's
4	perspective that's certainly bounding so we're
5	not going to dispute that. Whether or not the
6	Board finds that acceptable as a way to place
7	a plausible upper bound on rador
8	concentrations in the room, this idea of
9	sufficient accuracy comes up, this
10	uncertainty, it's in your hands. It certainly
11	is bounding.
12	I believe that's it, that's the
13	story. I'd be happy to try to answer but
14	before I close though. Ron, did I mess
15	anything up?
16	DR. BUCHANAN: No, no, you covered
17	it quite well, thank you.
18	DR. MAURO: Thanks a lot. Okay.
19	CHAIRMAN MELIUS: Wanda, what site
20	does this remind you of?
21	(Laughter.)
22	MEMBER MUNN: Deja vu really all

over again.

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CHAIRMAN MELIUS: Maybe we'll postpone this. Kidding. Okay. Questions for John or Ron or comments? Yes, Dave.

RICHARDSON: MEMBER I've couple questions. Starting with the completeness of the personal monitoring data, the bioassay data and the external film badge data, it was impressive that you went back and I found that pulled records and went through. very useful to work through the employment history and set it up side by side with the monitoring data. My first question, maybe NIOSH can answer this. Table 4.1 has the number of claimants from the site who met the definition as 244 and of those the number of claims for which external dosimetry records were obtained for the years in the Class definition is 192. So I take that percent of the claimants. That seems to me a larger source of data than the 15 which were I wonder if you could comment on evaluated.

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ROLFES: Yes, this is Mark MR. Rolfes and you're referring to the Evaluation Report, Table 4.1, I believe. In that we've reported the total number of claimants that we've received from the Department of Labor that would require a dose reconstruction. That includes all employees that worked at Weldon Spring plant, so it includes not only production workers but it includes administrative staff as well. So the analysis SC&A had completed was to sample production workers who were believed to be in the the highest potentially category of employees and in that exposed category of workers they found a much higher rate of monitoring frequency.

MEMBER RICHARDSON: Yes, that was my interpretation of these two numbers as well which raised to me the question of, I mean it wasn't a random draw. It was intentionally a draw --

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DR. MAURO: Oh, yes.

MEMBER RICHARDSON: The highest potential exposure which would say that it was when you're looking for information on the completeness of the records you were sampling those for which a priori we would expect information to be most complete.

Yes, and also because DR. MAURO: if you do -- you want the information from that group to be complete because you may end up eventually having to build a coworker model, and when you're building a model you will fail if there's any question that your data that you have is not -- in other words, if you feel that my goodness, we've got a data set but it doesn't capture the highest exposed individuals how can you build a coworker model? That has, in the past that has been a reason to grant an SEC because if you can't build a coworker model because you have inadequate data from the highest exposed group it becomes a showstopper.

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looked at what we believe to be the group with the highest potential for exposure just for that reason.

MEMBER RICHARDSON: So in reading the NIOSH report maybe I left with the wrong message. Is the message that the data are sufficiently complete with which to derive in the future a coworker model, or is it that they're sufficiently complete to do individual dose reconstructions using the records in hand?

This is Mark Rolfes MR. ROLFES: again and we had a discussion of this at the For the cases last teleconference meeting. that had complete we've to reconstructions for we haven't encountered a case where we needed a coworker model complete that dose reconstruction. And for the examples for cases where bioassay data may have been available for а production for example worker we may have used overestimating approach the early on in

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program such as OTIB-2 where we would assign a worst case scenario internal dose on the first day of employment, an approach that would tend to maximize the internal dose and result in an internal dose much higher than one that would be reconstructed based upon bioassay data. So we have completed essentially all claims for the Weldon Spring plant claimants. We've issued dose reconstructions for all with the exception of one claim I believe at this time.

The RICHARDSON: other MEMBER thing back that struck going to the me completeness of the dosimetry information for the 15 workers, you had a very nice table where you picked it up year by year and that again kind of conformed to my expectation that in the first years of operation, '57-'58, even for these production workers that you sampled the frequency was maybe 50 percent and then it 90-plus percent gets up to the that observed later on. But that there were, even over-sampling of those workers that

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seemed to me a small amount of information could be drawn from a small sample. I guess just from my own personal experience working at kind of the contention that there's 95 percent of the employment period is covered with personal monitoring data doesn't, you know, raises my eyebrows because I've really not been able to find that very often. And so this looks, I mean the pictures, when you dug into it, it looked more like we've seen in the early years. There's gaps in the records and where workers outside of some of the highest exposed areas there's gaps in the records.

DR. MAURO: You are now beyond what my knowledge of this is. The nuance that you're bringing up in terms of how things change with time and how that bears back on the statement regarding 95 percent is a good question I can't answer. Perhaps Ron could help and certainly of course Mark is here. But Ron, when you were looking at the data and the outcome that is a fairly complete set, 95

percent, could you help and get a deeper understanding of the issues and the questions

that were just raised by Dr. Richardson?

Yes, this is Ron DR. **BUCHANAN:** Buchanan with SC&A. Yes, in the Work Group meeting of May the 9th of 2011 SC&A was asked, we decided that there was an accuracy problem because they used copies of the original data. And then the completeness though, was it all And so we used an initial test to see if there was any indication that the most were monitored exposed workers not regular basis. And so this is the reason we chose the production workers of course because they should have been monitored and we would kind of expect that in the initial years. see for example, '57 and '58 we do not know if they were assigned. They were given the job production workers. We don't know exactly if they were working in production the first couple of years or not. But so that detail wasn't available.

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But what we did was we wanted to

2	look at the initial, do an initial test to see
3	if there was an indication of a problem and
4	this was the results we obtained and presented
5	that to the Board then the 13th of September.
6	And so from what we've seen at the
7	first take of it is that the 15 production
8	workers that we sampled were monitored except
9	for the first two years there was a lower
10	percent of monitoring both biological and
11	bioassay and external monitoring than in later
12	years. And so you know, we're not claiming
13	that 90-plus percent of the whole work
14	population was monitored. All we're saying is
15	that for these 15 expected exposed workers
16	that they did show monitoring as we put in the
17	plots there.
18	MEMBER RICHARDSON: Yes, thank
19	you.
20	CHAIRMAN MELIUS: Brad?
21	MEMBER CLAWSON: When you are
22	talking about sampling are you using Fernald's

1 data for Weldon Spring? 2 DR. MAURO: What we just described 3 was Fernald's data. MEMBER CLAWSON: 4 What's that? 5 DR. MAURO: I'm sorry. Ι just 6 crossed wires on you. No, the workers that 7 were reviewed were the Weldon workers, Weldon Spring workers and the completeness of 8 data for those workers both external 9 10 internal. 11 MEMBER CLAWSON: Okay. CHAIRMAN MELIUS: And just some of 12 13 the same methods, statistical methods have been used we had discussed at Fernald also. 14 15 Right? The Strom I believe it is. 16 DR. MAURO: Yes. We just crossed two different areas. When it comes to the 17 completeness of the bioassay data and the film 18 19 badge data for Weldon workers we study that as 20 a problem in and of itself, is it complete, and the answer was well, we found out it was 21 fairly complete for the group of workers we 22

looked at which were probably the high end
exposures. Now, the Strom question has to do
with okay, how are we going to reconstruct the
dose from inhaling thorium-232 which is
exactly the same problem that we had at
Fernald. And the solution is the same
solution at Weldon, namely we're going to use
breathing zone data that was collected and
estimate the upper end exposure using the
breathing zone data for Weldon workers, but
the methodology, the mechanics of how do you
do it, what's the acceptable way to take
breathing zone data and from that derive high-
end DWEs, daily weighted exposures. That
methodology was basically the Strom
methodology which was vetted fairly heavily
and closely during the Fernald meeting.

Now, I believe, now the way we and I point over to John, John Stiver did a lot of the heavy lifting on carefully looking at the degree to which Fernald mechanics reflected the Strom paper which is an excellent

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approach. And there are some differences but our recommendation on Fernald is that we believe that the methodology is scientifically sound and does meet the intent of trying to assign a plausible upper end dose on DWE exposure from thorium and that same methodology is being used here at Weldon using Weldon data.

degree which that Now, the to issue has been resolved, the breathing zone approach, the Strom approach as implemented at Fernald has been resolved quite frankly I'm not sure whether or not the Fernald Work Group has found that this, what I call quasi-Strom approach to deriving DWEs was, whether the Work Group Fernald has found that on I know SC&A acceptable or not. has recommended that yes, we find the approach acceptable. Whether or not the Work Group itself has decided one way or the other since the Work Group is still very active I really speak to that. though can't Even

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1 participate in those meetings I do not recall 2 whether or not the Work Group as a group has 3 agreed that yes, that approach is sound. 4 MEMBER CLAWSON: You also spoke, information that we're 5 the using 6 Fernald is the -- well, the process that was 7 discussed at Fernald, we're not using any of the data for the thorium, right? 8 DR. MAURO: 9 No. 10 MEMBER CLAWSON: But also the neutron/photon ratio from Fernald. 11 12 The measurements DR. MAURO: 13 good question. Ron, those measurements that were made that we had a problem with the 14 15 neutron being measured at one location in time 16 and the photon, I believe that might have been Fernald. Could you help me out a little bit? 17 18 DR. BUCHANAN: Okay. This is Ron 19 Buchanan with SC&A. I'd like to state that as 20 far as I recall now no Fernald data is being used, the actual data is being used for Weldon 21 Some of the methodology that's been 22 Spring.

developed are, but not the actual records of data except that NIOSH recommended the N/P ratio from neutron measurements at Fernald be used at Weldon Spring. We did an independent verification of a radioactive material such as was used at Weldon Spring using the Monte Carlo calculations which verified that it was the same number. And so in that case we independently verified the number from Fernald. But any of the other data is actual Weldon Spring data.

Now, originally, in the original TBDs NIOSH did use a number of Fernald information. NIOSH, you know, had problems with that and they went back and redid a lot of that to where there was no use of Fernald data except for the N/P value which we verified through what would be possible at Weldon Spring.

MEMBER CLAWSON: I thought there was a question on -- this is probably a question for Mark. The thorium, I thought

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1 that there was a difference of opinion on when 2 the years were. 3 CHAIRMAN MELIUS: What are you talking about, at Weldon Spring or at Fernald? 4 5 MEMBER CLAWSON: At Weldon Spring. 6 MR. ROLFES: This is Mark Rolfes 7 from NIOSH. One of the things I think that you're asking about, Brad, in our original 8 Site Profile for the Weldon Spring plant we 9 10 proposed to use surrogate data Fernald to assign thorium-232 intakes. 11 12 assigning 30 believe we're а nanocurie thorium-232 intake and a 30 nanocurie thorium-13 Since that Site Profile had been 228 intake. 14 15 published we received the SEC petition. 16 our SEC petition Evaluation Report we provided updated intakes based upon the daily weighted 17 18 average values that were from Weldon Springs. 19 So we have proposed an updated intake rate in 20 our SEC evaluation. CLAWSON: 21 MEMBER What years covered in this? 22 I was under the impression

1	that for thorium that NIOSH is saying it was
2	done between '63 and '66.
3	MR. ROLFES: That's correct.
4	Thorium operations at the Weldon Spring plant
5	occurred from 1963 through 1966. We've broken
6	down.
7	CHAIRMAN MELIUS: Brad, I'd like
8	to get to the petitioners so I'm trying to
9	wrap this up. That's why I'm rushing you a
LO	little bit.
11	MEMBER CLAWSON: Okay. Ingle
L2	report, 1991, that states that it was there
L3	from 1958 to 1966. Why aren't we using that?
L4	MR. ROLFES: I'm sorry, could you
L5	refer to that again, please?
L6	MEMBER CLAWSON: The Ingle, I-N-G-
L7	L-E, 1991 report. It stated that thorium was
L8	produced from 1958 to 1966.
L9	MR. ROLFES: Okay. Was this
20	specific to the Weldon Spring plant, or?
21	MEMBER CLAWSON: Yes.
22	MR. ROLFES: Was it also including

1	Mallinckrodt possibly as well?
2	MEMBER CLAWSON: Both.
3	MR. ROLFES: Okay. It is possible
4	that Mallinckrodt was conducting the operation
5	earlier than the Weldon Spring plant. However,
6	all records that we have available to us for
7	the Weldon Spring plant indicate that thorium
8	was only processed, thorium-232 was only
9	processed from 1963 through 1966.
LO	MEMBER CLAWSON: Well, okay.
11	DR. MAURO: If I may, Ron, to what
L2	degree did we
L3	CHAIRMAN MELIUS: Can we
L4	please?
L5	DR. MAURO: Oh, sorry, my
L6	apologies.
L7	CHAIRMAN MELIUS: Can we refer
L8	this to the Work Group, Brad? Get it to them?
L9	I think unfortunately they're not here today
20	so we can't tell what they've talked about or
21	not talked about on this. But we do need to
22	resolve these issues.

1	Are the Weldon Spring petitioners
2	on the line and do they wish to comment? Are
3	they, if you have your phone on mute. I
4	believe they submitted some comments which the
5	Board has received. If not we can then
6	continue and Brad, you have the floor. So
7	Josie?
8	MEMBER BEACH: I just have a quick
9	general comment. I wonder if this Work Group
10	would benefit from an additional Member being
11	assigned to it?
12	CHAIRMAN MELIUS: We'll get to
13	that tomorrow. There was a number of Work
13	
14	Groups that may
	Groups that may MS. TRIPLETT: Hello?
14	
14 15	MS. TRIPLETT: Hello?
14 15 16	MS. TRIPLETT: Hello? CHAIRMAN MELIUS: Yes, hi.
14 15 16 17	MS. TRIPLETT: Hello? CHAIRMAN MELIUS: Yes, hi. MS. TRIPLETT: Hi. This is Tina
14 15 16 17	MS. TRIPLETT: Hello? CHAIRMAN MELIUS: Yes, hi. MS. TRIPLETT: Hi. This is Tina Triplett, one of the petitioners. We just got
14 15 16 17 18	MS. TRIPLETT: Hello? CHAIRMAN MELIUS: Yes, hi. MS. TRIPLETT: Hi. This is Tina Triplett, one of the petitioners. We just got kicked off.

1	MS. TRIPLETT: Okay. We I am
2	with the other petitioner Karen Johnson and we
3	basically just want to and we're just a
4	little bit disappointed that the Advisory
5	Board Members couldn't be here. We were
6	looking for some sort of resolution today but
7	we understand there's more discussion
8	apparently that needed to be done and we're
9	hoping for that resolution at the next
10	Advisory Board meeting.
11	CHAIRMAN MELIUS: And I don't know
12	if you were on earlier but that was also our
13	intention if possible to resolve this at the
14	next Advisory Board meeting.
15	MS. TRIPLETT: Okay.
16	CHAIRMAN MELIUS: Any other
17	comments you wish to make at this point?
18	MS. TRIPLETT: Hold on a second.
19	CHAIRMAN MELIUS: You don't have
20	to, I just want you to.
21	MS. TRIPLETT: I think that's all
22	we have at this time.

1 CHAIRMAN MELIUS: Okay. Thank you 2 very much. Josie, then? Okay. Brad, you're 3 done? Okay. Anybody else have questions or comments on this? Yes. Bill, go ahead. 4 5 Yes, I just had a MEMBER FIELD: 6 question about the radon model that you're 7 using. You're assuming an equilibrium ratio of 1 then? 8 This is Mark Rolfes. MR. ROLFES: 9 10 Basically the assumption is there wasn't a lot of radon being produced at this site because 11 12 it wasn't ore that was being processed, it was actually ore concentrates. And so the only 13 clearance mechanism that's being used to 14 15 remove radon from the building is radiological 16 decay. There's no building ventilation that being credited to reduce 17 is the radon 18 concentration. 19 MEMBER FIELD: The question was So there's no ventilation and 20 with progeny.

you assume there's no plate-out as well, I

assume.

21

MR. ROLFES: I'd have to take a look back at the model. I'm not prepared to answer that today.

MEMBER FIELD: I'm just trying to assess the equilibrium issue of 1. For me, I was just trying to clarify that. Okay.

Т CHAIRMAN MELIUS: think certainly I'm a little confused by in SC&A's review saying it's bounding but sort of leave open the issue of sufficient accuracy. haven't had a chance to read that report but I think certainly one of the questions we would have is a little bit better understanding of both the assumptions in the model as well as what the activities within were buildings and how many workers would exposed because I think that's usually the kind of facts we want to take into account in terms of determining, you know, evaluating sufficient accuracy and plausibility and so Now, it may be in your report and I don't know, John, you're here.

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1	DR. MAURO: Yes, your question
2	deals with a lot of aspects of the
3	calculation. The part dealing with, given you
4	know the quantity, and I'm not going to speak
5	to Ron can certainly speak to it, but given
6	you know the quantity of material, assuming
7	100 percent of the radon that's produced by
8	the source, and I apologize, I thought there
9	was some ore there but the concentrates, the
10	radium that's producing it, the thorium-232
11	that's producing the thoron, by assuming 100
12	percent of what's being produced becomes
13	airborne and reaches full equilibrium without
14	any removal by any mechanism in my opinion is
15	too high. That circumstance really can't
16	happen. So, but it's certainly bounding. The
17	reality is that radon will be depleted by
18	ventilation more so than the thoron. The
19	thoron reaches equilibrium very quickly
20	because it's relatively short half-life
21	compared to the longer lived progeny, radon
22	and progeny. So in our opinion it's certainly

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a very high number that places an upper bound. Can you have plausible circumstances where that could occur? I would say no. I would be, you know, but at the same time it's bounding. To start to take air turnover rate into question which you certainly can do we're back at the Blockson model.

CHAIRMAN MELIUS: Okay. Thank helpful. Helpful you, that's but not necessarily resolving. Okay. If there are no further questions pending we will be probably back to Weldon Springs in our next meeting. So hopefully we'll be farther along in dealing with some of these issues but thank you, John and Mark also for input your and the petitioners.

We will take a break now. We will reconvene at 4:30 and we'll have a presentation on Pinellas and then we will go directly into the public comment period. Again, for those of you that just arrived it's helpful if you wish to make public comments to

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1 sign up at the desk as you came in. We usually go in order and that's helpful. We'll 2 3 be back at 4:30, thanks. the 4 (Whereupon, above-entitled 5 matter went off the record at 4:12 p.m. and 6 resumed at 4:31 p.m.) 7 CHAIRMAN MELIUS: We're going to start with an update on the Pinellas Site 8 Profile and Pete Darnell from NIOSH will be 9 10 first and then Phil Schofield who's chair of the Work Group will make some comments after 11 12 that. 13 MR. DARNELL: Good afternoon. Мy name's Peter Darnell. I appreciate the time 14 15 to go over the Pinellas Plant Site Profile. operations at Pinellas site 16 DOE began in 1957, ran through 1997. The plant 17 was located in Clearwater, Florida and what 18 19 their main job to do produce was was 20 precisely-timed neutron generators that were used to initiate nuclear explosions. 21 22 were accelerator type generators. They also

fabricated other weapons components at the site including lightning-arrestor connectors, specialty capacitors, crystal resonators and so on.

In September 1994 Pinellas stopped producing weapons-related components, began to change its mission to environmental management. The Department of Energy transferred much of the Pinellas production capability to Kansas City plant and Sandia National Laboratory. DOE continued the cleanup which was complete in December 1997. The two contractors at the site were the General Electric Company from 1957 to 1992 and Lockheed Martin Specialty Components, from '92 to 1997.

history of the Site And the Profile, the first profile was complete for Pinellas in 2005. In 2006 we did Technical Basis Document updates, page changes in the external TBD well site as as In May of 2007 SC&A description and X-ray.

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completed their Pinellas profile review and they came up with 11 primary issues and 8 secondary issues. And just to let you know, in this presentation I'll only be addressing the primary issues. June 2008, well actually June 2007 we had our first Work Group meeting where we discussed the issue. June 2008 we met again and basically came to agreement in principle how to address the issues that SC&A gave us.

In July 2011 we started completing the Pinellas Plant Site Profile updates. Rev. 2 went into effect for the introduction site description, environmental and internal dose sections. In August we did the external. October we completed the medical dose.

The 11 primary issues that were brought up by SC&A, the first one dealt with the reconstruction of doses in the absence of early health physics records. Basically SC&A and NIOSH has come to agree that we've done a comprehensive records search and SC&A concurs

with the policy that NIOSH has which is we'll keep looking and when we find more we'll add it. We have done that several times over the course of the TBD updates with Pinellas, the last time being this summer where we found more documentation. It turned out that most of it was redundant to what we already had but what little we did have we incorporated.

The second issue, potential doses from insoluble middle tritides, were sufficiently developed. Again, SC&A and NIOSH to at least an agreement come principle on how to address this. For t.he Pinellas site, the workers that two had occupational exposure monitoring for tritium, their dose will be assigned as the Class S tritide dose based on the bioassay. The remainder of the workers will get a tritium missed dose should they be in the position where they could have gotten exposed.

The third issue is minimum detectable concentrations and uncertainties

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for plutonium and bioassay measurements. issue remains open although we do have a draft of Rev. 2 which is being updated again to fix this particular issue that SC&A and NIOSH have agreed upon. Basically it's a discussion of where and how plutonium was used on the site and the very low likelihood of any exposure. Plutonium on the Pinellas site was either in triple encapsulated radio sources or in checked sources for instrumentation. Very little possibility of leakage, very possibility of contamination spread, little possibility of plutonium internal contaminations.

Issues 4, 5 and 6, personnel badging, personnel dosimetry D&D and again are all TBD updates that NIOSH and SC&A have redefined in principle. We are awaiting their review of the updated TBDs to iron out any final details before closing out these Missing internal dose estimation issues. methods was also added into the TBDs. And

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again, we're just waiting for final reviews from SC&A. Potential missed doses for depleted uranium, adequately defined and assessed medical exposures, techniques and protocols for uncertainty and preconceived X-ray exposure uncertainties again are all in the new Technical Basis Document updates.

path forward. Our NIOSH has completed basically this the happened today. We completed revising the plutonium bioassay section. SC&A is moving ahead with several new reviews into the Technical Basis Documents. What has happened is when we started this effort it was a different crew of SC&A personnel supporting the Work Group. Now it's a new crew going back to look at They're going to summary of data captures. revisit discussions about the White Paper on plutonium bioassay. Excuse me. They're going characteristics to review performance identified by NIOSH for dosimetry. They're going reviewing D&Dmonitoring to be

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information for adequacy and review the revision to TBD for any the other SC&A That's basically where we concerns. are. NIOSH is ready to support SC&A in their reviews, get them whatever information they need. Questions?

CHAIRMAN MELIUS: Why don't we go right to Phil because I think looking at the presentations they're sort of complementary. We'll just get confused let alone you, if we try to start asking questions, but thank you, Pete. Don't venture far, stay up front so when we have questions.

MEMBER SCHOFIELD: Okay, I appreciate it. First I want to compliment SC&A and NIOSH both on the work they've been doing on this. This is basically a complete rewrite of the Technical Basis Documents so they have been putting a lot of effort forth in this. Pete's already gone over quite a bit of the background about when we had the last meetings. On the 13th of October we had the

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Work Group meeting and NIOSH presented their summary, their changes in relation to the context of the unresolved SC&A concerns.

Most of what I'm going to talking about is kind of concerns from the SC&A action items right here. They're going to review some of the documents in the table summary of data capture searches for Pinellas its for Plant relevance dose and reconstruction. Right now this is ongoing. additional Based preliminary results information will be requested from We're going to review Mound tritides White Paper as it applies to Pinellas and this is something we've been bouncing around off poor Josie's group. So, but we figure if we can settle that issue there we can settle the issue here and we'll all come out a little better. So, and then there will be, SC&A will prepare a formal response on the overarching methodologies going on. That status of that is still going on.

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Now, we're going to get into reduced worker interviews. We luckily just by pure luck ran into a couple of gentlemen out in Albuquerque who happened to be out of Pinellas involved in a lot of the work out there and so we were able to do a classified interview with them. I don't believe anything we had was -- correct me if I'm wrong, Josie or Brad, but I don't think anything was classified, was it?

MEMBER CLAWSON: No, it wasn't.

SCHOFIELD: Ι didn't MEMBER remember anything being classified. Okay, so we're going to do worker interviews on the onsite destructive testing of neutron tube leaks incidents. Also unmonitored dose from depleted uranium/tritium beds. The qlass tubes, there was a number of indications that they had some of these were dropped, broken, spilled so there was potential. There were uptakes probably there.

The next thing is the, we're going

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to look at the revision to TBD-5, Occupational Internal Dose. To remove guidance -- maybe you already did that. I'm sorry, you already did that, removed the plutonium bioassay We're going to revisit discussions there. resultant from the SC&A White Paper review of Pinellas plutonium bioassay data. This is dated December 9th, 2008. Review bioassay data for confirmation of comprehensive null results. We're going to conduct interviews to obtain more information on the types of RTGs.

The use of asbestos gloves implies that Pu elements were in place during testing and that some of these may have been fairly large RTGs because of thermal energy being put out there. So, you know, you use gloves but I've been around those a little too much.

And then worker recollections of their plutonium bioassay program, we want to find out frequency, who was monitored, what the criteria was for selection and resulting

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results. Review badge data, confirm that most highly exposed or exposed versus non-exposed were badged. The strategy will likely involve matching job titles for badged versus unbadged personnel. This relates back to item number 1. We plan on conducting worker interviews to obtain more information about why badges were worn, maximum exposed versus cohort sampling, and criteria selection which jobs were because not everyone at Pinellas was badged. You had a large group of people that were badged and some weren't.

We want to review the performance characteristics of dosimeters used in the post June '74 time period as identified by NIOSH and tabulated in TBD-6. Occupational external dose, that status is still ongoing. Based on preliminary results one concern remains. Prepare a memo outlining deficiencies in the D&D discussion methods following NIOSH action to identify and provide monitoring survey results, activity descriptions to support the

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position that D&D activities do not require additional dose assignment beyond what is already considered review for adequacy -- I can't speak today. Conduct worker interviews to obtain more information on activities and exposure potential during the D&D period. Also, availability of survey data compiled under 10 CFR 835 and associated DOE directives standards. That status is ongoing, waiting for NIOSH on their part. Then we'll have to respond.

Their review of TBD-3 occupational medical dose, this is the last one that was updated. Confirm that information presented at the Work Group meeting is included and that the new information addresses SC&A concerns. I guess that's out now so we'll have to look at that and then.

The path forward is SC&A expects that the reviews enhanced by interview results will likely extend to 2012. We were scheduled to do some interviews on Friday, because of

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problems we had to cancel. So we will be rescheduling those in about the next month or two sometime hopefully.

The process of conducting, documenting process and finalizing interview results will likely extend into 2012 which we already know how that's going. Then we have the dependence on the resolution of Mound tritides issue. Though an SC&A is not tasked, TBD revisions could benefit from formal review TBD-3 medical doses. in some cases. And we will be scheduling a fourth Work Group meeting with both NIOSH and SC&A have completed their assigned task. Any questions?

CHAIRMAN MELIUS: Just so I understand this right, there's a little confusion here but so, if I understand, NIOSH has done major revisions in the last three years I believe it is on the Site Profile document. If I understood you right, Pete, today you finished the plutonium?

MR. DARNELL: Yes.

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1	CHAIRMAN MELIUS: That's
2	timeliness, right?
3	MR. DARNELL: The Technical Basis
4	Documents have all already been revised. They
5	were completed last month.
6	CHAIRMAN MELIUS: Oh, okay.
7	MR. DARNELL: The last one was
8	completed. We then based on the Work Group
9	meeting re-revised the plutonium section for
LO	that task.
11	CHAIRMAN MELIUS: And that was
L2	today.
L3	MR. DARNELL: That was completed
L4	today.
L5	CHAIRMAN MELIUS: Okay, okay. And
L6	that's timely, right.
L7	MEMBER SCHOFIELD: Yes, we have
L8	seen that yet.
L9	CHAIRMAN MELIUS: No, we
20	understand. And just clarify me on the
21	MEMBER SCHOFIELD: Well, I
22	apologize, I guess SC&A has seen it. I
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haven't.

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STIVER: Hi, everybody. MR. I'm John Stiver and with Aris Papadopoulos task manager for Pinellas. I've been fairly some of these developments close to attended the last Work Group meeting. And I some of the disconnect we're here, some of the apparent disconnect has to do with the fact as Peter mentioned that there was kind of a hiatus there from June of '09 until we had the last Work Group meeting just in this last October during which some major sea changes in TBDs were instituted. when you look at the issue matrix in that snapshot in time from June of 2009 there are a lot of things that we kind of had agreed in principle to that we would have to see, you know, whether these TBDs really implemented what we had requested to the extent we felt would be adequate. One example being this issue number 1 was whether the references were adequate characterized by exposures pre-1980.

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And NIOSH has provided in TBD-1 a table with about 400 different references. No, it's clearly not practical for us to go look at every single one of those and it's even more complex because some relate to internal dose, some relate to external, some to environmental at different time periods. And so it's kind of one of the reasons I put in that last bullet towards the end on the way forward that because there have been such comprehensive changes that, you know, even though we haven't been tasked some of these TBDs might benefit from review.

We do believe and our first impressions are that they are good TBDs, there are certainly some major improvements there. It's kind of an ongoing process right now and it would be premature to make any final judgments.

CHAIRMAN MELIUS: And that's not what I was trying to imply nor I think what Phil was at all either. There clearly needs

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1	to be additional review. I was just trying to
2	get at what other, sort of the first revision
3	going through what, if anything needed to be
4	done now and I think Pete was saying you're
5	complete. The only one I'm still a little
6	confused on is the D&D period as to what is
7	required there, being looked for there.
8	MR. DARNELL: NIOSH has gone
9	through the available documentation and
10	actually addressed the D&D period specifically
11	on page 13 of the site description.
12	CHAIRMAN MELIUS: Okay.
13	MR. DARNELL: Again, it's one of
14	those
15	CHAIRMAN MELIUS: It has to be
	CHAIRMAN MELIUS: It has to be looked at. Okay, okay, I understand.
15	
15 16	looked at. Okay, okay, I understand.
15 16 17	looked at. Okay, okay, I understand. MR. DARNELL: Right.
15 16 17 18	looked at. Okay, okay, I understand. MR. DARNELL: Right. CHAIRMAN MELIUS: Thanks,
15 16 17 18 19	looked at. Okay, okay, I understand. MR. DARNELL: Right. CHAIRMAN MELIUS: Thanks, everybody. Paul, then Gen. Okay, that's

most sites. And it was kind of my impression it's claimant-friendly. What is it about this site that makes it one of the major issues that's identified?

MR. DARNELL: It's a holdover from the way the site started looking at medical doses. They weren't using the TIB for medical doses. Now they are, and the approach just hasn't been looked over by SC&A yet.

CHAIRMAN MELIUS: So a loose end more than a major issue I think, if that. Paul?

MEMBER ZIEMER: I don't know if this, which of you this is for but just a question external dosimetry. general on There's kind of an implication that we don't know the basis for which people were selected for dosimetry and therefore you're going to talk to some of the workers. But are there any records that give the official policy on who gets -- who wears the badge? I assume this, this focused most of on neutron

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1	dosimetry, is that correct?
2	MR. DARNELL: Actually the
3	dosimetry was a mixture. At the Pinellas site
4	dose was reported as a whole body dose which
5	included neutron, photon and tritium. So it's
6	been very difficult to split the doses up. The
7	badges that were used changed over different
8	periods. We know what they were, we know what
9	the responses were. What we didn't have was a
10	record that showed us the individual doses to
11	photon, the individual doses to neutron. We
12	got the whole body dose for most of the time
13	period.
14	MEMBER ZIEMER: And they threw the
15	tritium in there which has got to be internal.
16	MR. DARNELL: Yes.
17	MEMBER ZIEMER: Oh, okay. Well
18	that's a little different.
19	MR. DARNELL: Yes, very different.
20	That's why NIOSH has taken the approach into
21	looking at the dosimetry. It's quite apparent
22	in looking at the records and the history of

the records that they have that the Pinellas
site focused on personnel that were performing
the radiological operations. At the Pinellas
site the radiological operations was an
extremely small percentage of the overall work
at the Pinellas site. As a matter of fact,
the radiological hazard is extremely low
compared to the chemical hazards that were at
the Pinellas site. So we have the contractors
focusing on the workers that were actually
doing the hands-on radiological work. So what
you have is a worker dosimetry set of data
that has a whole bunch of people at zero, 95
percent of them right around 100 millirem and
then you tail off. I think the highest
individual maximum exposure at the site at any
time was 1.71 rem. The 95 percent and 100 or
lower, excuse me.

MEMBER ZIEMER: And one other, just a general question. I assume that this wouldn't violate any classification issues but if it does the But neutron say so.

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1	generators, are they typically the 14 MeV
2	deuterium, tritium?
3	MR. DARNELL: Because we're not
4	sure we're not going to answer that.
5	MEMBER ZIEMER: Okay.
6	MR. DARNELL: About the
7	classification issue, not the answer.
8	MEMBER ZIEMER: Okay, thank you.
9	MEMBER SCHOFIELD: Just one other
10	brief thing. I know there's been a long delay
11	from the start of this to this point but
12	Pinellas records seem to become orphans and
13	they have literally been scattered throughout
14	the complex. So you have to go all over the
15	country to find their records and that has
16	definitely slowed things down.
17	CHAIRMAN MELIUS: Okay. No more
18	questions? Thank you both.
19	MR. DARNELL: Could I add one more
20	thing? I apologize. About the external
21	dosimetry. This is a very different site than
22	most DOE sites. Either the radiation was

turned on when they were doing the test or it
was turned off. So in your dosimetry records
what you were going to have is a person with
10 millirem or whatever on this, on day X and
then day Z way down the road three or four
months later they may have another 10
millirem. No exposure in between yet they
were monitored. And this is repeated
throughout the history of the site. So what
you get is a truly skewed set of dosimetry
towards the highest exposures. That's really
important to understand because when you know,
when you've captured the highs and you know
the lows are at zero because you have
dosimetry records at zero, you've got
dosimetry records up to 1.71 rem, it became
quite apparent quickly that there was a lot of
work that was done at the site that didn't
involve radioactive materials, didn't involve
an exposure which gave us the ability to use
the 95th percentile right at 100 millirem to
provide the unmonitored worker. So dosimetry
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while it's weird and different than most sites it's actually a little bit easier to assign the dose to the workers. Yes, sir.

CHAIRMAN MELIUS: Okay, go ahead,
Dave.

MEMBER RICHARDSON: Just a question because it's sort of counterintuitive to me. I mean, often when I talk to people about neutron dosimetry in the years before TLD approaches -- some health physicists are really skeptical that you can do very much in reconstructing the neutron dose reliably from the NTA films. And they sort of caution you about that. And here the sort of spin is that the dosimetry is easier here but because we, we're turning on and off the source but it's a neutron source I guess is the paradox.

MR. DARNELL: Well, it's partially a neutron source and photons were also emitted. It is, to me it appears easier because it is so discrete. You have one action, it's done, it's over, there is no

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1	exposure, there's no real
2	MEMBER RICHARDSON: But we don't
3	have a level of information which necessarily
4	reliably even allows us to place workers in
5	the plant. If I'm understanding the site
6	history correctly some of them were moving
7	from Wisconsin to Pinellas and so we're at a
8	scale of resolution which is far away from
9	determined when they were in front of a source
10	and the switch was turned on and off.
11	MR. DARNELL: Actually, we have
12	that.
13	MEMBER RICHARDSON: You have time
14	information?
15	MR. DARNELL: Well, we have the
16	day that the tests were complete and the
17	dosimetry match-up. So the person with, like
18	I told you that has that exposure, it's coming
19	on a day they were doing testing and we can
20	see that in the records.
21	MEMBER RICHARDSON: Okay.
22	MR. DARNELL: That's how discrete

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the exposures were to the externals. Now the internal is something different, but the external was pretty discrete.

MEMBER RICHARDSON: Thanks.

CHAIRMAN MELIUS: Okay. I think we need to move into public comment period. Thank you, Pete and Phil. I have a list of about a dozen people that have signed up here for public comment. I'm going to go in order but I'm going to start with the people at believe are associated with the least Ι facility first, and then do other Pinellas people here. And then later on we'll, if there are people on the line that would like to make public comment we will get to them.

Before we start Ted has some information.

MR. KATZ: Yes, just to advise everyone who's participating in public comment that you may have noticed there's a court reporter here. All these Board meetings are fully transcribed verbatim meaning word for

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word. So your comments will be captured that
way as well and all of the Board transcripts
from all of the Board meetings get posted on
the NIOSH website. So whatever comments you
make will end up on the NIOSH website
available to everyone in the public. So
anything you say personal about yourself,
that'll be available to the public. We don't
redact that personal information. We do,
however, just note, redact personal
information you give about other people to
protect their privacy because it's not them
speaking here. So if you talk about another
person we will redact enough information so
that the public doesn't know who you're
talking about. It doesn't mean that people
will, the public will know what you've said
about the person but not who that person is.
So just want you to understand that and the
full policy should be on a piece of paper in
the back table there if you really want to
read it. And also for people on the phone

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1	it's also on the NIOSH website under the Board
2	section of the website. Under the meeting
3	section there's a policy called Redaction
4	Policy I believe and that's where you can see
5	the policy in all its glory. But that's
6	essentially what it is, what I just told you.
7	CHAIRMAN MELIUS: Okay. We will
8	get started and the first person that is
9	signed up is Donna Hand.
10	MS. HAND: I yield that to the
11	workers because you all hear from me all the
12	time. I prefer that you hear from workers.
13	CHAIRMAN MELIUS: Okay, well we'll
14	right down to the next person I have signed up
15	is Steve Smith. Is Mr. Smith in the? You can
16	either use that microphone there if you prefer
17	that one. Okay, that's fine. And if you have
18	something you'd like to hand in written you
19	can give it to us and we'll also make copies
20	and distribute it.
21	MR. SMITH: I'm Steve Smith of St.
22	Petersburg. I started my career with General

Electric in 1979. I began my tenure in the metalized department where I worked around cyanide baths and acetone. I would paint ceramic parts from the lathe machine with a lead-based slurry. Once the parts were painted I would place the ceramic parts in a hot furnace. No protective equipment was required.

first introduction to The that area was the strong smell of acetone. time I became acclimated to the smell. After three years I took a position in final test where I performed radioactive testing on the final product before it was sent to Quality Every day I had my hands in a Assurance. clear liquid that would dry my hands out and turn them white. I worked inside the taped while the tests were being magenta area performed. I operated the radiography machines and would go to tube exhaust and other departments nearly on a daily basis. wore a film badge and gave a monthly urine

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sample as well. Again, I was not required to wear protective equipment.

next six years I worked in The shipping and receiving where mУ duties included unloading trucks, X-raying parcel that came through the Pinellas Plant. My deliveries took me to every department at the Pinellas Plant. Once a month I would load 55 gallon drums. I would assist the shipping department and there was three of us that would take the government truck and we would transport these 55 gallon drums to MacDill Air Force Base where we would meet a government was waiting on the tarmac plane that and transfer the drums onto the plane. The drums were hot to the touch and I was wearing asbestos gloves. They were still hot.

Once unloading truck was removing crate that was clearly marked а radioactive. As I was unloading the crate it broke open, spilling out the contents onto my shoes and onto the floor. Ι immediately

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contacted my supervisor as well as the hazmat personnel. Looking back, the hazmat team never washed me down. My supervisor allowed me to receive new work shoes.

After 13 years of service at the Pinellas Plant I was laid off. During my years at the plant I developed allergies which I still suffer from today. 1986 was diagnosed with chronic fatigue syndrome. In 1984 I developed a cancerous mole underneath my right eye. In 1982, this public record, going to qo into physician performed a chest X-ray. It showed that I had scarring on the lungs. My sister who was also employed at the Pinellas Plant had the same findings in her chest X-rays. She same physician that I had. had the The physician gave me a signed affidavit which I included in my packet that I submitted to NIOSH.

In 1998 my sister Kathy Sanders was diagnosed with lymphoma-melanoma. She

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died July 10th, 2000. That same year I too was diagnosed with melanoma. In 2001 it recurred, and in 2005 it recurred again. In 2004 I was diagnosed with beryllium disease by a doctor in St. Petersburg.

I attended the initial meeting for the Pinellas workers in 2004. At that meeting Larry Haas who represented the Department of Labor divulged to us, and this is to the best of my recollection, that the government had knowingly exposed the employees to high levels of radiation. In the same sentence he said that the government was ready to write checks out to employees who had been affected. Ι stood up and challenged him that the burden of proof would be placed on the employees. assured everyone that would not be the case, but it has been the case. I have jumped through many hoops in order to provide information from my dose reconstruction only to be turned down every single time. He also shared at that same meeting that the records

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of the employees had been lost.

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I am proud of the part I played in helping to end the Cold War. Like the first responders on 9/11 the Pinellas workers have also been neglected. In conclusion, my family had never had a history of cancer until my sister and I were diagnosed with melanoma. find it strange that her and I worked at the both shared the same plant and we scarring as well as cancer. I find it strange that the employees spotted an alligator with three eyes and a frog with two heads. soil was such to where it changed the mutation of the wildlife imagine what the radiation was doing to us.

I believe it would be advantageous as well as cost-effective to give every claimant a set settlement along with a medical card. This to me would seem to be a lot simpler rather than the countless studies, meetings, that we're conducting here today and have been conducted. Unfortunately I'm afraid

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that as more and more of us die off and as time goes on the liability aspect just goes away. Thank you for allowing me to have this opportunity to share what's on my heart.

CHAIRMAN MELIUS: Thank you, Mr. Smith. The next person signed up is Russell Sherk. Okay.

MR. SHERK: Yes, my name's Russell Sherk and I'm here on behalf of my wife Mary Davidson Sherk. She worked at the Pinellas Plant from 1993 to '96 and in 1998 she passed away from acute appendicitis eight days after our second child was born. And I don't know a lot about what she did.

I know also, I have some information on my father-in-law, David R. Davidson. He worked at the Pinellas Plant from 1956 to 1994. And basically my mother-in-law, Judy Davidson, couldn't be here and I was wanting to just give a little information about him because she filed a claim. Well, originally he filed a claim in 2004 for lung

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scarring and he went to some of the same meetings that Mr. Smith mentioned earlier and filed the claim. And then in 2005 he also was diagnosed with a rare carcinoid cancer and later died on June 1st, 2006.

And I just wish that the Board would do the best they can for the employees that worked there at the plant, that they would follow through with what they were intending to follow through when this program was first started. And I just appreciate the time that you've given me. Thank you.

CHAIRMAN MELIUS: Thank you. The next person who is signed up is Doris Ensor I believe. Okay, that's fine. And if you could introduce yourself for the record so we have.

MR. MILLER: My name is Josh Miller. My grandmother is Doris Ensor and my grandfather is Stafford Hutchinson. I'm a radiation worker here in Florida. I do have some experience. I work with radionuclides, gamma-emitting, but I do have prior knowledge

of alpha and beta gamma index rate emissions and dosimetry reporting. I work closely with the radiation safety officer.

My main concern is when I heard about these glass tubes, the tritium. Now, whenever they were dropped the employees immediately affected by that would inhaled it. It would have been absorbed into their bloodstream and into their capillary lungs, and upon that vessels inside their point is when it does the real damage. seems as though without proper reporting was there an acting radiation safety officer or a person acting as such that there was a prior reporting of these and the people affected directly.

Knowing that, there was talk about the film dosimetry badges. That's not going to pick up alpha emissions. You're going to have to have air monitoring which I heard referenced but to what point. Was it near the point of origin, or was it across the

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building? Because that point is going to be dissipated into the air. Your parts million going be lower the are to and concentrations are going to show different than what I've seen. I saw my grandmother's dosimetry report and it seems 100 millirem is extremely low for a person working within an environment that there is gamma and neutron and photon. Or sorry, X-ray, neutron and photon emissions. And then of course without having volume studies for the alpha emissions there is no comprehensive data for that. haven't seen it.

my grandfather had COPD what it diagnosed by medical was professionals. But it directly correlates with lung scarring, the X-rays. It states it throughout his entire medical records. directly correlates with the diagnosis and the beryllium poisoning, treatment for or beryllium disease. Immunosuppressive, oxygen exchange. Не was on oxygen. Не was

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constantly on steroids and so forth and so on.
It seems as though, that seems to be a pretty
prevalent issue that at some point or another
it seems that all have been exposed to some
form or another of inhalant whether it be
beryllium or heavy metal contamination.
Nowhere in his medical records does it say
that he was ever submitted for any kind of
control. There was no process control for
seeing what his contamination level was for
heavy metal and tritides and beryllium until
it was too late. He died of obstructive
disease in his lungs which is kind of a
general term which I would assume looking back
the doctor should have checked for beryllium
poisoning. That being said it seems as though
the records weren't clearly kept, that a lot
of the things aren't taken into consideration.
It doesn't seem as though it is being treated
fairly. And that's as far as my knowledge of
it.

CHAIRMAN MELIUS: Okay, thank you.

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Pete Darnell is still here if you'd like to
talk to him or I think John Stiver is here
also about give you a little bit more
information on the sampling and what was done
in terms of monitoring because it is
complicated there. As I said, we're still
the Advisory Board and our contractor are
still in the process of reviewing that and one
of the other things we look into are, you
know, spills, accidents and so forth, and try
to look at what sort of documentation, what
might have occurred and were exposures missed
in the dose records from those kinds of
incidents. It's one thing and it's very
important that, you know, people have
knowledge of that or you know, recollection
can inform us because it's not always, at
least at many sites those are not always
recorded well.

MR. MILLER: That's another question I forgot to ask.

CHAIRMAN MELIUS: That's okay.

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1	MR. MILLER: Is there a current
2	survey or a background of the facility now?
3	Because I think that would be easy enough to
4	reverse decay because it's essentially a
5	proven theory, or a science.
6	CHAIRMAN MELIUS: Again, I think
7	Mr. Darnell could probably, somebody more
8	familiar with the facility than I am could
9	probably help you with that and answer that
10	question also.
11	MR. MILLER: All right, thank you.
12	CHAIRMAN MELIUS: Yes, thank you.
13	The next person I have signed up is David
14	Vaughn.
15	MR. VAUGHN: My name is David
16	Vaughn, Pinellas Plant. I started work there
17	on July 3rd, 1967, and I left on August 1st,
18	1997. That's a little over 30 years. For the
19	first 12 years I worked in the plant I worked
20	in the laboratory. In the lab my job was to
21	do tritium analysis. Now, these broken flasks

you're talking about, they happened. In fact,

in the part of the plant where it was considered to be the hot area and you had to wear shoe covers and lab coats and things to get in there, so those things did happen.

after working there about 10 or I guess about 12 years I developed basal cell carcinoma on the side of my head. I had a habit when talking to people of rubbing the side of my head right here. Now in the early days we didn't have the same kinds of safety procedures in place in the beginning that we had later on so I didn't wear gloves. I handled all these things with my bare hands. So there's no doubt in my mind that basal cell carcinoma was caused by the tritium contact with the skin on the side of my head.

Well, that was the first time I had surgery. About four years later I had to have surgery again in a similar location. This time they told me I was getting, in addition to having a basal cell removed I was getting a face lift on one side. What they did, they

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peeled the skin back from the front of my ear all the way back to about here, about the middle of my head, and then they removed a lot of nerves, a lot of tissue under -- from the side of my head. Now, I've been told that tritium can't penetrate the skin. Well, I'm telling you that's not true. I know for a fact that it can and for about two years my head was numb from the top to the chin, all on the right-hand side. Well, fortunately it's never come back. It was removed.

I also developed squamous cell a little later on the side of my shoulder here. And then about 10 years ago I had surgery for adenocarcinoma which was colon cancer. In each case I've been very lucky it was caught early.

Now, in addition to doing tritium analysis for about 10 or 12 years in that part of the plant I also operated the linear accelerator. This accelerator was inside the main building. That was a 200 kV accelerator

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and basically the purpose of this accelerator was to produce neutrons.

subsequent to my operating Now, the accelerator after a couple of years they moved it out of the main building into another building which was specially constructed and modified to house this accelerator. The walls were 4 feet thick, the ceiling had 21 inches of poured concrete. Now, the reason why the poured concrete and this to me seems a little strange but I was told this was the reason was because of something called skyshine. some of you are probably familiar what that is, I'm not. But I think it had to do with flying over the building airplanes they're doing testing. The reason that I feel this should be a concern was because for the first two years it wasn't in that building, it was operated in the main building and the only thing that surrounded this accelerator were chipboard walls, about 3/8 inch thick or something like that. So, that's something

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that led -- I haven't seen this reflected in any of the reports that I've read, in any of the documentation.

Now, the accelerator, someone said about 14 MeV something neutrons. This accelerator produced both high and low energy neutrons, not just high energy neutrons but also produced neutrons that were low and as I understand in the two to three range. the first 12 years Ι worked building, at the plant.

I worked last 18 years The security where I basically handled technical security and as part of my job there I was in all areas of the plant at all times of the day and night. One of the places where I spent time was in the building where the RTGs were built. One of the reasons why I was there is because put in portable monitoring we equipment to detect the presence of weapons or maybe the possibility of someone taking one of these RTGs out of the building.

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Something that I noticed about this portable monitor, there was a vault, I say a vault, a room where this, the RTGs were stored. You walked between the monitor in that room, the monitor would actually detect the fact that you had walked between it and the source of these RTGs. Now, someone says they were triple encapsulated. I think there was something besides alpha being produced by

that's what

the

monitor

addition working in In to all areas and working with a portable monitor and working around the RTGs I also visited most of the other sites in the weapons complex during the last 18 years as part of my job. I don't remember ever being badged anyplace I ever went. Т don't remember ever wearing dosimeter when I was at the Pinellas Plant. I was in the bioassay program when I did the tritium analysis but I never wore a dosimeter at any time.

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these

picking up.

RTGs,

It's mУ feeling that maybe everything is being properly and accurately reflected in the Site Profile. I haven't looked at the latest revision of it so I don't know what's been changed but I know earlier versions that Ι looked at were inaccurate. I quess that's all I have.

CHAIRMAN MELIUS: Thank you. Paul, do you want to answer the linear accelerator question?

Dr. Melius asked MEMBER ZIEMER: me to make a comment about skyshine. fairly common in radiographic facilities. fact, it's one of the issues we have at General Steel Industries currently. Skyshine has to do with radiation scattered over the top of shields where there is not a shielding ceiling as it were, and that scattered radiation that comes over the top and reaches referred to outside is occupied areas skyshine. So it appears from what you've said that the shielded ceiling that was added in

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1 later facility was to eliminate that 2 radiation which otherwise would scatter to the 3 occupied areas over the top of the shield. 4 CHAIRMAN MELIUS: Thank you for those comments. The next person I have signed 5 6 up I believe is Josh Miller. 7 MR. MILLER: I've already gone. Okay, I thought 8 CHAIRMAN MELIUS: Thanks. it looked familiar. 9 The person next 10 is Bill Sunderbruch. And Mr. Sunderbruch, if it would be easier for you to sit down we can 11 bring the microphone down. Okay, fine. 12 13 MR. SUNDERBRUCH: I'll just sit down if you can hear me. 14 15 CHAIRMAN MELIUS: Yes, thank you. 16 MR. SUNDERBRUCH: My name is Bill Sunderbruch. I started, you said it was 1957, 17 it was actually 1956, the temporary plant in 18 19 St. Petersburg and worked there till -- for 37 and a half years. During that time I started 20 early employee working at 21 out as

temporary plant, 34 employees. And we built

generators there.

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In May we moved to the main plant. one of the last ones to leave the I was temporary plant. And a couple of years later I became a supervisor for 25 years. that time I built generators, quite a bit of different products. My last assignment in manufacturing was in the RTG for five years. Department of Energy required a physical inventory of heat sources every day. talked about asbestos gloves. I had to go in with my bare fingers, run it across the heat sources every morning, count 200 to 300 heat sources then report to DOE about that they were all there.

Mr. Darnell is, not to take anything away from him but he does not have all the information that he should have had. And it's not his fault. I was in the tube exhaust area for supervisor for 15 years. I'd get a call on the phone and they say your urine sample is a little high, better have a

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little beer on the weekend, get rid of the gas I inhaled. So you come in Monday morning leave a sample. They call up, say okay, you're fine now. Well, if you were fine on Monday then Friday's point report went in the garbage. It was never recorded.

When I first filed for my claim I got, through the Freedom of Information Act I got my medical records. During the 25 years that I was a supervisor every year they'd give That physical gave you a you a physical. blood test, X-ray, the whole smear. managers came in to get their physical at the plant because it was so thorough yet in my report there was not one of my tests showed up, or not one of my physical exams showed up. looked at my radiation dosage that I received over the years. Peter's probably got it. The amount of phone calls I got, the amount of exposure I had doesn't show up on that report.

Now whether some of you worked at

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other plants or not we had what they called the CIP program, cost improvement program. I think it was sponsored by the government and what it was, that each section of the plant was given a target area to save so much money a year. Well, if you reported, health physics for example had a bad year, a lot of radiation exposure, they didn't get as much incentive if you will. So the plant's cost improvement program would drop. So there was a lot of things that weren't reported that happened.

I wished I could help Peter with some of the information that may have been destroyed or not recorded. I don't know how he's going to recover it but there's a lot of sick people at the plant. I've had, you talked about an investigation going to come up, you're going to get more people together. Please hurry up. I'm 79. I started at 26 and I was one of the young ones. Most of them are gone now.

I would be more than happy -- I

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was supposed to be at MacDill on Friday. It
got canceled. I have friends that I met with
the other night at the GE Quarter Century
Club. Some of the engineers, the technicians,
section managers said they'd be more than
happy to discuss classified information with
you if it got on notice. Some things came up,
some programs that we had at the plant that
people got I don't want to say radiated.
That's a good point, they might have been. And
that should be brought up. I don't know how
you're going to do it, you can't do it here.
As a matter of fact I've been retired now 19
years and I don't know what's classified
anymore and what's not. But I'd be more than
happy to volunteer my services to help you out
any way I can. And I can get you a list of
people that would be more than happy to help.
Do you have any questions for me?

CHAIRMAN MELIUS: Thank you, but we certainly I think do want to take you up on your offer to help. I think that was either

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through NIOSH or through the Board has our own contractor that helps us review these sites and that's one of the paths they wanted to do was to interview a number of people. So John Stiver and John Mauro are there and I think they'll follow up and get in contact when we coordinate that. And we also have ways of handling the classified information procedures and so forth that protect everybody with DOE's assistance on that and cooperation.

it, appreciate We and we appreciate you coming here. And again, to reiterate, we assume we don't have all the information information, the that's so provided in these meetings and other outreach efforts are really important to us. We try to do everything we can to take them into account in our review. So thank you again.

The next person signed up is Robert Bossard I believe. I apologize if I mispronounce.

MR. BOSSARD: I've been called

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CHAIRMAN MELIUS: Well, with a name like Melius --

MR. BOSSARD: It's Bossard, I started in 1963, I was an that's okay. hourly employee like Bill said he was and then I worked my way up. I worked as a lathe operator and right across the hallway they machined beryllium. And of course, I've got beryllium in my lungs as we speak, but I was a supervisor of separators, capacitors, thermal battery, LAC connectors, classified area that Bill said we're not allowed to talk about, but two of my employees that worked in that area, they died. Another one worked with radioactive parts, '56, he died.

We offloaded those heat sources when the SST trucks came in, our job was to get them unloaded as fast as possible which we did. We got a lot of commendations for the job we did on that. We had to put them in the vault and like Bill said they were brought

out. They had to be inventoried and inspected. So a lot of people were involved in that also. The thing that concerns me, I've really been to so many meetings, I worked there 34 years and nobody's ever told me how they came up with the 50 percent, that number. I'm still confused. How do you come up with it? Do you just reach up in the air and grab that 50 percent? How do they do that? somebody explain that to me? Nobody, right? I'm back to square one.

CHAIRMAN MELIUS: Yes, it's calculation based on what the probability is that a particular cancer will be related to the dose that you received. It's not simple to do because it also takes into account that there may be some error in making that And so 50 percent was taken as assessment. essentially the doubling of the risk so there would be 1 chance in 2 that that was due to your exposure, whatever that exposure might And then there's an error, a correction be.

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put into it to take into account what error there might be in that. So there's some prior use of that not in this -- well, in legislation but also in other compensation programs, that's where it came from. But it's not an everyday thing, that's for sure.

MR. **BOSSARD:** Okay, another concern is where the people were going in and out of area, where they built the tubes that people was required to wear film badges. myself at that point was an expediter. I went in there every day and counted the parts to make sure they were going at the right speed to get to their final product. There was workers in there that I know, in fact there's one here right now working the glove box. She was not required to wear a film badge and another thing is Ι don't think they're accurate because of the simple reason they just put them on a lab coat and they They weren't pressed against your flopped. body which I was told that's the way they're

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supposed to be to get an accurate reading.

Does anybody dispute that? I was told from

Oak Ridge that's the way you're supposed to do

it to get an accurate reading.

see, I guess that pretty Let's much covers it. I probably had some other stuff here but. These folks, I think, I got tired of going to funerals. People dying in their fifties and we buried radioactive parts in the North 40. People dug them up. gallon drums were leaking. They had to put them in other new drums and those people, once again in their fifties, 54, 56, are no longer with us. The drums were sent back to Savannah They did their job but they're no River. longer with us. So that, Peter Darnell, I don't know what he thinks about the Pinellas Plant, but it was a dangerous plant. you very much.

CHAIRMAN MELIUS: Thank you, sir.

The next person I have is Robert Hill. Again,

Mr. Hill, if you'd prefer to sit down while

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1 make your comments we can bring 2 microphone down to you if that's easier. 3 MR. HILL: No, I want to be seen. 4 CHAIRMAN MELIUS: Okay. MR. HILL: I've got a lot to talk 5 6 about. CHAIRMAN MELIUS: Okay, thank you. 7 All right. I started 8 MR. HILL: with the Pinellas Plant December the 9 10 1979, and I retired April 21st, 1997. when I first started working there in 1979, 11 12 1980 it was so primitive. Pinellas Plant was I mean, I want to talk about 13 primitive. neglect, negligence, a lot of negligence at 14 15 that plant at that time it was so primitive. 16 And there was a man down there named Mr. [Identifying information redacted]. 17 call 18 used to him Doc [Identifying 19 information redacted]. He was in charge of And they used to, 20 the radioactivity program. right in front of the building they used to 21 build, take their backhoe and dig out a big 22

hole. Then they would take all those pipes and ducts that came from the stack, and you know the stack was the most dangerous place at the plant. That's where all your radioactivity went up through the stack. So they would take those ducts and throw them out there in the hole. And so Doc [Identifying information redacted] would say, "Any of you guys want to make some overtime?"

"Yes, I'll make some overtime."

"I want you to go out there and hose those ducts down." These are aluminum ducts, pipes, you know, full of radioactive. No badge, no nothing. The only thing you had just some coveralls and just regular was little plastic gloves and a little old mask. And all that radioactivity. Go out there and hose it down. They gave you something like foam to hose it down. And that came directly from the stack. And so Doc [Identifying information redacted died. I would assume he died from radiation, I'm assuming, me. Doc

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So then they tried to find another way I guess to get rid of that stuff. And so I got another job hauling chemicals. this ca, I used to haul around some tritium, krypton and argon, nitrogen, hydrogen. That was some dangerous stuff. I didn't know then, And I was hauling it to I was young. different areas. And I went to Area 109, was one of the areas that I serviced which was the dangerous area at Pinellas Plant. And I would take tritium there, different chemicals, and finally they got dosimeters. And I remember one time, I think mine registered 5 one time. And then they'd tell you, "Go home, drink some beer and come back."

So, now, another job I had I worked directly with the stack. That's where they used to cut up all this small material. They would put it in the drum and haul it off to Savannah River. So the only thing they gave me was some coveralls and the little mask

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that you wear and some goggles and a suit, you know. And then all this stuff is coming directly from the stack. Now I have to cut it up, put it in the barrel, cap it and send it to Savannah River.

So out of all of that there was some neglect. They didn't give you the right equipment, they didn't give you the right dosimeters, they didn't give you nothing that was, that would protect you like it was supposed to.

I used to go down Now, to [Identifying information redacted], that was our plant doctor. I used to say, "Doc, look man, I'm breaking out with these different allergies. I'm breaking out with these different rashes, man." He said, "Well, I'll give you some cream to put on that." I said, "You think that's going to do any good?" "Well, try." These said, rashes allergies, and not only that I broke out with a severe case of arthritis which I still have

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that comes from those big fans. They built some generators and the buildings used to be so cold in the wintertime and I contracted arthritis in my spine, arms, by going to different areas inside and outside.

And so finally, comes down the plant's going to close. And so they said anybody want to make overtime? Yes. So we started to decontaminate the building, and during the day I was working with hazmat and they would have spills all over the place, you know. That was dangerous.

You'd go down to the lab ain't no telling what those guys were using at the lab and they would say smoke, lab, so on and so on and so on. Now we've got to go down there and put this stuff out. And so I did that for about four years, worked with the hazardous waste, hazardous material. We used to put on these suits that made us look like spacemen.

And so now, coming down to close the place up we were using decontamination,

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down in the lab here, there, all over the plant. And so I got out of there with arthritis, I got out of there with -- this is extreme arthritis. I got out of there with allergy, I got out of there with respiratory problems.

Now, I just want to say this. has been good to me because I saw all these people die the whole time I was there. of people died while I was there, and then when the plant closed down a lot of people died after the plant closed down from cancer and different infirmities. So, now, you could call it luck, a blessing, fortunate, whatever. I got out of there and I'm still around, working around all that dangerous tritium. didn't even know nothing about krypton, what krypton meant at all. And I used to haul that stuff. So I've been blessed, fortunate, lucky.

As I close this out I just want to say this. If we get anything, it's a small

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1	price for so many people who have gave so
2	much.
3	CHAIRMAN MELIUS: Okay, thank you,
4	Mr. Hill. Is there anybody else here from
5	Pinellas Plant who would like to speak, didn't
6	sign up? Because we're going to start talking
7	about some of the other sites.
8	MS. COPE: Are we allowed to speak
9	from the phone?
10	CHAIRMAN MELIUS: Yes, you may. Go
11	ahead. If you'd identify yourself, please.
12	MS. COPE: I'm Donna Cope, wife of
13	Al Cope that worked at GE for
14	CHAIRMAN MELIUS: GE or
15	MS. COPE: from 1958 to '94.
16	CHAIRMAN MELIUS: Oh, okay.
17	MS. COPE: He passed away in
18	2003. We worked seven years on trying to get
19	some help from DOL and NIOSH. I just want to
20	encourage these workers that worked at that
21	plant to please not give up. Don't give it
22	up, keep working at it. It's sinful that they

1	have to get up here and bare their souls and
2	beg for help. I'm really sorry. If I can do
3	anything for you guys please let me know. I'm
4	up here in Alabama right now, but several of
5	you have my address and my phone number. Just
6	don't give up. Thank you.
7	CHAIRMAN MELIUS: Thank you.
8	Anybody else from Pinellas that wishes to
9	speak? Okay. The next person we have signed
10	up related to the is Knut Ringen. Dr.
11	Ringen.
12	DR. RINGEN: Thank you very much.
13	This I think is the sixth time that I've come
14	before you, and you have my disclosures from
15	before. My name is Knut Ringen, and I
16	represent CPWR which is part of the building
17	trades, in this case also the Augusta Building
18	Trades Council that represents the workers at
19	Savannah River and also the petitioners who
20	are involved in the Savannah River SEC.
21	You'll recall that when you met in
22	Richland in August that Dr. Taulbee presented

a proposal for a limited SEC for Savannan
River for some thorium areas. And the way
that he proposed to define that Class was to
use the dosimeter codes that workers had
because he said that the dosimeter code would
correspond to the very specific work area
where thorium had been used and therefore you
could use that code to identify the worker. I
congratulated him on his hard work after that
and I said, because we had just gotten this
the night before we had not had a chance to
evaluate it. And I said we were going to do
so. And in the interim period together with
Bob Warren who's a lawyer who represents many
of the workers down there we have done
considerable work evaluating this that we'll
talk about more tomorrow I believe. And David
Anderson from Bob Warren's office is here and
will speak a little bit about that as well.

What we concluded from our evaluation is that in some cases, in many cases the approach that Dr. Taulbee presented

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can be used to assign a worker to those areas. But you cannot use that approach to separate or to deny a person that could have worked there. In other words, you can use it to include but not to exclude, and that's a very important distinction.

There are two issues that I would like to go through in terms of what we did in First is for construction our evaluation. workers which NIOSH has acknowledged is very difficult. They propose to define Ι understand it construction workers by using the codes that are issued for the central shops which is a special area where most of the construction workers signed into the site However, in looking, reviewing the anyway. from the construction workers records Savannah River it turns out that while they got their security badges in the central shops in most cases those badges are not specific to But they did not get their any work area. radiation badges there in most cases.

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get their radiation badges wherever they went out to work in the first time they were there. And they might use the same badge wherever they worked in the facility. So this poses a very specific problem. We don't see how you can that approach for construction use workers. And that's a big issue because we believe that construction workers represent about 30 percent of the total claimants at Savannah River.

Jeff Kotsch earlier today talked a little bit about how they go about their work in terms of establishing whether a claimant is a legitimate claimant under the Act. And we have a contract at CPWR that I'm the PI on that does employment verification for the most difficult. cases that they cannot get information from either DOE or the corporate, that is the large contractors they use to verify employment and to get records and so And about 20 percent of the claimants who are construction workers mostly who have been

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employed by subcontractors are sent to us for verification. And we have looked so far at a total I think of 532 workers at Savannah River that we have been asked to verify employment just to confirm that they've worked on the site as a whole. In about two-thirds of those cases we've been able to find evidence using union dispatch records, pension records and that kind of thing that we have access to.

to try to establish for employment within a particular area inside the Savannah River Site would be absolutely impossible. The likelihood of that is lower than slim in the very, very majority of cases. So with regard to construction workers approach in general is not going to work. would exclude too many workers, and it would not be claimant-favorable, at least that is our conclusion.

Now the second way that we evaluated what Dr. Taulbee had done was that Mr. Warren, who represents claimants and

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therefore can get access to records, submitted FOIA requests for radiation records for a number of workers and put together a file on six individual workers based on five of them had radiation records and one had -- he used the determination letter that had been sent to worker from NIOSH based on the After he had gotten all of reconstruction. the records he coded them with the tracking office and sent -- with them to SC&A to tracking number and sent them authenticated authenticate, have these were real and accurate and valid records.

Each of these records shows that you cannot rely at least in these cases on the dose records to either determine radiation dose, place of employment or duration of employment. So we think that there is very considerable problems in this regard also with the approach that Dr. Taulbee has presented.

We -- I met with Mr. Griffon and with Arjun in

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Washington, D.C. and we went over our findings and SC&A has also done some additional validation work and has found many similar problems with this approach.

findings, Based on our we basically suggested two changes to what Dr. Taulbee had recommended to you. And I just want to present this to you tonight so you can The first is that since we think about it. see any way that you can use records to exclude somebody, to say that they couldn't possibly have worked in a designated We don't see how you can exclude any area. Therefore we think that for the workers here. time period proposed by Dr. Taulbee you have to include all workers on the site.

The second finding that we have is that Dr. Taulbee has presented that he's looking at a lot of other radionuclides also, many additional thorium areas and so-called exotic nuclides there and that he wanted to look at those in more detail. And we would

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hope that the Board would support us in saying that that should be done on an expedited basis at this point. If you have so much trouble placing somebody in the areas where there is thorium you're going to have trouble doing the same thing with all of these other radionuclides if you find that there are the same problems in terms of establishing the radiation dose. But that, you ought to be able to now that he has created a model to complete that work much faster and to make the determination about how the Class should go. Yesterday those are SO our two recommendations for you to think about.

Yesterday I was in Augusta, and I presented our findings and our recommendations to the building trades that have represented the workers at Savannah River. And I told them that I was going to be here today, and they asked me to say a couple of things. The first is that we need -- it would be very nice if we could have more time to review what

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NIOSH recommends before it is suddenly
presented. In the when this was presented
at Hanford we had, the petitioners had not
heard about it until the night before. When
the Working Group reviewed this issue on
December 2nd, during a call Dr. Taulbee
proposed an amended Class Definition that
nobody had had a chance to deal with either.
And whether or not that is what's going to be
presented here tomorrow I don't know, maybe
there's another change to it also. We have no
idea. We got something in the mail that said
this may or may not be the final thing that's
going to be proposed. And we can't have these
things presented at the last minute and then
say well, we have not had enough time to
review this so therefore we have to defer this
to yet another time period.

The second thing that they asked that they invited NIOSH down is me to say 2003 first there in talk about their to about the dose records and the concerns

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1	problems with them. And they have felt
2	consistently that since that time NIOSH has
3	spent an overly large amount of time trying to
4	show the excellence of the Savannah River
5	radiation monitoring program and its records,
6	and that it has taken the word of the health
7	physics professionals at the Savannah River
8	Site much, much stronger than it's taken the
9	word of or the evidence presented by workers.
10	So I hope you will also consider
11	those issues. I don't think that they're
12	unreasonable, and I will stop with that. I
13	have a longer written statement that I will
14	give you that you can have. It's mainly for
15	the Working Group. Thank you.
16	CHAIRMAN MELIUS: Thank you, Dr.
17	Ringen. Mr. Anderson, do you wish to? I
18	thought you did.
19	MR. ANDERSON: Do we have time?
20	CHAIRMAN MELIUS: You certainly
21	do.
22	MR. ANDERSON: Is it okay if I

stand?

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CHAIRMAN MELIUS: Yes.

MR. ANDERSON: It's been a long day for everybody. My name is David Anderson. I'm the administrative manager for the Law Offices of Bob Warren in beautiful Black Mountain, North Carolina. Mr. Warren would love to have been here for this. This is a very special meeting for him, but his health has not been so great lately, so he asked me if I would come down and talk to you all. I'd like to just read a prepared statement if that's okay and then maybe tomorrow we can go further.

The SEC Petition Evaluation Report addendum submitted to the SRS Work Group on August 11 of this year illustrates many of the problems associated with NIOSH's continued insistence that it can accurately reconstruct dose for the tens of thousands of workers in different jobs at the Savannah River Site. By its own admission NIOSH thought it had covered

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the thorium issue earlier until new information surfaced about thorium being stockpiled in the order of tons in parts of the site where NIOSH had not looked. Even with new records and documentation in hand NIOSH finds big gaps in its understanding of how the thorium actually moved through the plant.

The petitioner, [Identifying information redacted], who our law firm represents, submits that these same gaps exist in NIOSH's understanding of how workers were exposed to radiation in general at the site and how record-keeping varied in different onsite locations during different time periods and with many different subcontractors. Just as the original assumptions about thorium were we contend that NIOSH's assumptions wrong, about having accurate records are also not based in fact. Over the years law firm has represented scores of workers whose radiation records appear fractured at

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best or completely absent at worst. SC&A and NIOSH as well as this law firm have in our files dozens of interviews and statements from former workers who vividly recall incidents, accidents, spills, off-normal work practices, radiation control lapses, and less-than-formal conduct of operations, yet NIOSH has glossed over these worker and claimant statements citing lack of documentation.

Now we learn through this ER actually addendum that NIOSH has documentation of quantities of just events in lab notes, not in official DuPont incident records special or hazard investigations. Claimants have consistently been asked or been tasked with documenting incidents they believe would affect their dose reconstruction, yet NIOSH should even acknowledge that these types of lab notes will never be available to the average claimant.

Accurate record-keeping is at the core of this SEC and while NIOSH has often

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expressed great admiration for SRS monitoring standards the lab notes identified in the Petition Evaluation Report Addendum 2 provide a detailed revelation of sloppy conduct, control lapses, and other significant problems even at the very heart of the facility, the 773 inner laboratories. Why would this area be any different from every other area at the site when it came to work practices?

Similarly, NIOSH states that, and this is a quote, "Maintenance and construction consulted workers by Health Physics were before and during operations involving contaminated areas or equipment," yet many workers, including the petitioner [Identifying information redacted], report that it was a common occurrence that no HP staff were around on weekends, and several workers report being in areas that were originally thought to be safe, then being evacuated later when someone realized it was still hot and HP arrived late NIOSH paints a rosy picture of to the scene.

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operations at Savannah River Site, but countless former workers consistently maintain a different viewpoint.

NIOSH contends that its proposed Class will be easily identifiable by consistent use of badge codes and remarks that, and I quote, "One technician stated that all workers who worked in regulated areas had to wear film badges," and this is a continuing quote. "The technician indicated that there were no exceptions to workers having to wear dosimeters in regulated areas."

According to the ER, current quote, "The proposed Class will be based on the SRS requirement that all workers entering a regulated area wear a dosimeter badge," yet many interviewees in operations, production, and construction consistently offer different story. Why is it that NIOSH chooses one technician's statement on which to base its wide-ranging contention that badges were always worn, yet ignores the many statements

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to the contrary that it already has on file from other workers? It's as if the entire proposed Class appears to rest on this one technician's statement.

Using NIOSH's standard for this proposed thorium-related Class will miss many thousands of workers simply because their records no longer exist. There's no way to determine how many workers, through no fault of their own, will be left out of the SEC because of faulty record-keeping or non-disclosure of records by the DOE and various contractors and subcontractors.

many examples There are in our files of workers who may fall into this gap of documentation, and a few descriptions follow. The woman with breast cancer who is documented in 773-A but has no exposure records. carpenter with bladder cancer known to be at Savannah River Site but whose whereabouts in 1967 and 1968 undocumented. The are construction worker with leukemia who was sent

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home in a raincoat and rubber boots after his
clothes were confiscated for excessive
contamination but for which event there is no
incident report. The many employees who
started out in construction then, like many
others, were hired into positions but have no
early dosimetry records. The many clerks and
office workers who were not issued TLD badges
but who regularly delivered mail, urine
samples, materials, and supplies to and from
hot areas but whose visitor badge data is
missing. The Forest Service workers without
badges who went into all areas of the Savannah
River Site's almost 200,000 acres, wading in
contaminated ponds, digging out contaminated
and radioactive railroad ties before burning
them in some cases or taking them to burial
grounds and doing other jobs usually
associated with construction. The security
guards whose health was in danger when they
checked buildings, vehicles, or railroad cars
for leaks and exposures before health

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physicists came on the scene to measure off-scale radiation levels. The escorts who accompanied construction workers into thorium areas and could not leave the area until the worker finished the job and whose records have not yet been found. And the laundry workers who washed contaminated clothing including masks coming out of 773-A, CMX, and TNX.

applaud NIOSH for admitting that the site information is inadequate concerning thorium. We hope that the Advisory Board will recognize this admission for what it is, the proverbial tip of the iceberg, because we believe other record-keeping for all workers in other time periods are defective as well. We contend that the original proposed Class is reasonable though we accept and appreciate that NIOSH has made small steps to advance the process.

Finally, I want to follow up on what Knut said, too. We have seen that thorium did continue, at least in the NIOSH

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1	inventory list, until 1977 and even though we
2	don't want to see this SEC held up while we
3	wait to learn more about what happened with I
4	think there were 2,000 kg of thorium there in
5	1977, we do think we would like to ask you all
6	to consider that in an expedited way for
7	further inclusion in the Class. So, thank you
8	very much.
9	CHAIRMAN MELIUS: Thank you.
10	Gordon Rowe, is he on the line? Are you on
11	the line? Mr. Rowe? Yes, go ahead.
12	MR. ROWE: This is Gordon Rowe.
13	Can you hear me?
14	CHAIRMAN MELIUS: Yes, we can,
15	sir.
16	MR. ROWE: I'm one of the signers
17	of the petition for Savannah River Site, and
18	I'd just like to point out that there's been a
19	very long, drawn-out process that NIOSH seems
20	to come up with all kinds of excuses to drag
21	it out, to not to need to find, implement
22	and gather more information. And I think it's

quite unfair that this petition has been drawn out, drug out for so long a time, for several years now.

And there's been any number meetings that NIOSH has had and they have been told by the construction workers that we haven't been to monitoring. There's been a the records have not situation and And the construction workers have accurate. worked for any number of areas and places where they haven't been monitored properly. And it seems to me that they don't listen to what the construction workers have told them. We are second class citizens it seems. They seem to listen to what the production workers say and the people they had talked to on the plant site more so than they listen to construction workers.

I just think that it's been a long, drawn-out affair, and it's quite unfair to construction workers and to people as a whole, to all the people that filed claims and

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1	whatnot that they seem to not seem to want
2	to find any excuse to drag this thing out, to
3	not make a decision on this petition. And I
4	appreciate the opportunity of you letting me
5	talk and bring up my position in this matter.
6	CHAIRMAN MELIUS: Thank you very
7	much, Mr. Rowe. Is there anybody else on the
8	phone who would like to make public comments?
9	Okay. If not then we'll close the meeting for
10	today. We will reconvene at 8:15 tomorrow
11	morning.
12	(Whereupon, the above-entitled
13	matter went off the record at 6:10 p.m.)
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