# 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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82nd MEETING

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TUESDAY FEBRUARY 28, 2012

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The meeting convened at 9:45 a.m., Pacific Standard Time, in the Waterfront Hotel, 10 Washington Street, Oakland, California, James M. Melius, Chairman, presiding.

#### PRESENT:

JAMES M. MELIUS, Chairman
HENRY ANDERSON, Member
JOSIE BEACH, Member
BRADLEY P. CLAWSON, Member
R. WILLIAM FIELD, Member
MICHAEL H. GIBSON, Member
MARK GRIFFON, Member
JAMES E. LOCKEY, Member
WANDA I. MUNN, Member

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 PRESENT: (continued)

DAVID B. RICHARDSON, Member
GENEVIEVE S. ROESSLER, Member
PHILLIP SCHOFIELD, Member
PAUL L. ZIEMER, Member
TED KATZ, Designated Federal Official

REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS:

ADAMS, NANCY, NIOSH Contractor AL-NABULSI, ISAF, DOE ARMIJO, ROBERTO\* BATT, CHRISTINA, CDC CIVILETTO, SAMUEL\* COX, CHRIS, HHS CRUZ, RUBEN, CDC FITZGERALD, JOE, SC&A GLOVER, SAM, DCAS HINNEFELD, STU, DCAS KINMAN, JOSH, DCAS KOTSCH, JEFF, DOL LEWIS, GREG, DOE LIN, JENNY, HHS MAKHIJANI, ARJUN, SC&A MCFEE, MATT, ORAU MCKEEL, DAN\* NETON, JIM, DCAS ROLFES, MARK, DCAS RUTHERFORD, LAVON, DCAS STIVER, JOHN, SC&A

\*Participating via telephone

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

9:30 a.m.

CHAIRMAN MELIUS: Good morning. I am Jim Melius, Board Chair. Welcome, everybody, and I will turn over to Ted.

MR. KATZ: Are our phone lines open? Thank you.

CHAIRMAN MELIUS: And, Ted, you can do your thing.

MR. KATZ: Thank you, Dr. Melius, and welcome, everyone at the Board, in the room, and on the line, to the Advisory Board on Radiation Worker Health, it is the 82nd meeting here in Oakland. We are glad to be here.

To let people know on the phone, there are materials for the presentations for the Board on the NIOSH website under the Board section, under the Meeting section, and all the formal presentations should be posted there at this point; and I also just note for people on the phone, please mute your phones

so that it doesn't interfere with the meeting except those of you that are addressing the meeting at different points.

To mute your phone, you press \*6, and then to take your phone off of mute, you press \*6 again, and also please don't put this call on hold at any point, because that interrupts the call for everyone else on the phone. So hang up and dial back in, if you need to leave the meeting for some period. Thanks for that.

through Let Board us run So we will take a formal roll attendance. call, have several sites and we are discussing today. So if one of those sites you have a conflict for, please note that as we go through roll call, and let's begin with the Chair.

(Roll call.)

MR. KATZ: Thank you very much. Dr. Lemen, are you on the phone with us, by any chance? We will check again for Dr. Lemen

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after lunch.

CHAIRMAN MELIUS: Good. Our first presentation today is Stu. There you are. I couldn't find you. I thought you had run out on us.

MR. HINNEFELD: Well, I have managed to resist the urge so far.

I think everybody here knows me. If you don't, I am Stu Hinnefeld. I am the director of Division of Compensation Analysis and Support. I also am supposed to know how to run a computer. So that remains to be seen. I don't know how to run the computer. I can tell you that. It takes its own time.

The presentation that is in your package includes our normal program update and program statistics. As is our recent practice, I don't intend to go through the statistics too much. I will just briefly mention a synopsis, that at this point we have now received over 36,000 claims for dose reconstruction. We have dispositioned, either

through dose reconstruction or cases being pulled or administratively closed or pulled for SEC, all but about 1,000 of them.

Then, of those 1,000, there are about 250 that are in the hands of the claimants. We have draft dose reconstructions in the claims. So the actual number of cases in front of us that we know we have to work is somewhere between 700 and 800.

So we have made a lot of progress on the dose reconstruction, and we are being pretty successful at getting those out in a timely fashion in nine months, except for a couple of longstanding issues that sites have been out for a long time, but we think we will disposition this year.

Going through then the actual news portion of the presentation, I have been giving updates on internal staff assignments for the last two meetings, because Chris Ellison has been acting on a detail as the Deputy Director of our Division, because David

Sundin, the Director -- or the normal Deputy
Director of our Division was on a detail in
another NIOSH office across the street.

David's detail ended Friday. So as of yesterday, David is back as the Deputy Director, and Chris is going back to doing just one job, which is Team Leader for our Communications Team. So she has been essentially laying both roles while she was acting as the Deputy Director.

So Dave Sundin -- you will again see his name in our communications where you have normally seen him, and you will see Chris' name then on Communications, really, to reflect the activities of our Communications Team. Chris just did a marvelous job. I was really happy with the job she did in the position. I think it may have stressed her a little bit. I know she spent a lot of long days trying to keep up with everything.

One big piece of news that, I guess, probably everybody knows already, but

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significant it was kind of from standpoint. So I want to make sure I talk about it. That is that on February 6th, HHS published a final rule about Probability of essentially Causation that adds chronic lymphocytic leukemia as one of the covered cancers in the program.

When the Probability of Causation rule was first published -- that is Part 41, right? -- 42 CFR 81. When that was first published, chronic lymphocytic leukemia was assigned to Probability of Causation of zero, because there was general consensus that it hadn't been shown to be radiosensitive.

the intervening years, In was a fair amount of discussion about, well, there really does seem to be some evidence that it might be. There are a number of other cancers where the evidence is at least pursued and managed similar. So we accomplish this rule change, that it really minor change to the rule.

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Ιt essentially removes one chronic lymphocytic sentence, which says leukemia is assigned a probability of zero, but it has the effect then of making chronic lymphocytic leukemia a covered cancer. expect some small influx of claims. We estimate maybe 300 claims that were submitted but never accepted by DOL that they had.

The Department of Labor can pull those back out. People don't have to reapply. They can pull those out, and then they will forward those to us for dose reconstruction. This adds them to dose reconstruction. rule change does add the not them to presumptive cancer list. So it is available for dose reconstruction, that those models and the Probability of Causation IREP models have been worked out and are being finalized. The effective date of the rule change is March 7th, which is 30 days after the date of publication of the final rule.

So we will start to see those

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cases going through the final steps of the process at least sometime when they get there.

I am not 100 percent sure if Labor has started referring them or not, but there won't be any Probability of Causation determinations made until after March 7th.

We have made a bit of a change in our worker outreach process to, we believe, serve our -- integrate it into operations, our Division operations. worker outreach contractor has, in large part, pursued outreach at areas that we feel like there is interest in the site, where we can develop populations either to share information with covered populations or obtain information from the population. We try to do our outreach in both ways in terms of people to talk to in that process.

It occurred to us that, in our SEC process, we also attempt to find people to interview. That is one of the things we ask petitioners, is do you have people -- do you

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know of people that you think we should interview as part of our Evaluation Report investigation of this SEC petition.

On our own device, we would tend to look for places where contact with the site would take us: Site management, and so you would tend to get former safety and health managers, operation managers and things like that.

We said, well, we really ought to try to -- when we pursue people to interview, first of all, we shouldn't put a burden on the petitioner to identify -- certainly, if they have people they know, but we shouldn't make them the major contributor. They shouldn't have to come up with a large number. We don't want to put that burden on the petitioner, and we should also try to make sure we have a broad list of interviewees.

So we have asked our outreach contractor, who is adept at identifying worker groups, whether it be organized labor or

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retiree groups and things like that, to make these outreach efforts, too. So we have incorporated their efforts now into our SEC evaluation process in hopes of trying to broaden the types of employees that we interview during our initial Evaluation Report for the use of SEC.

So that is being worked out. is being done at some sites now. I have a couple of pretty good reports from people who have worked on our project that the outreach contractor is pretty helpful, this is really going well at this particular site. So we are hopeful that that will add that for us, and also make it easier to find people interview as we investigate these Evaluation Reports.

Then finally, an update on 10-year program review action items. I have only some very brief things to mention here, because since we have a number of actions to do on 10-year review, it turns out we also have other

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jobs that we are trying to do to accomplish what we have to do on the program. We have our jobs to do as well as these process changes.

So it is always slower than you would hope when you start to embark upon things that -- evaluation of the process that you are using.

We have, though -- in the area of quality of science review, one recommendations that received we was to EPA documents evaluate some that speak surrogate data usage and risk assessment, and we did agree that we would have, say, a nonhealth physics person -- in this case, it is industrial hygienist, look those an at documents and look at what we do, give us some evaluation of how does this document provide us guidance that maybe we should adopt in our program.

We have, I believe, just a draft so far, a draft report, and it is being

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finalized by the industrial hygienist who has performed that review that will have -- I believe there are a couple of recommendations in there for us that we will pursue, completing the implementation of that.

In the area of dose reconstruction quality -- this is in the dose reconstruction area of the 10-year program review -- we have been working with the Dose Reconstruction Review Subcommittee, because that item was on their agenda already. We have been working with that in terms of ways to improve the QA/QC process on dose reconstruction.

As part of that conversation or as a result of those conversations with the Subcommittee, we have adopted -- or implemented a kind of a -- it is a duplicate PR process where we have health physicists for our organization perform what we consider a QC dose reconstruction independent of what ORAU does.

The cases to be performed in

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duplicate are chosen at random by computer application. The computer application then populates essentially an inbox for our staff.

ORAU is not told which claims are selected for our review.

Our health physicist then does a dose reconstruction following the quidance that is available, and then when what we call production dose reconstruction arrives from ORAU, then we have a way to compare how health physicist prepared dose our the reconstruction compared how ORAU to whatever contractor prepared the production dose reconstruction.

We started selecting about two per month, I think, two claims per month for this process, as they come in, as they are referred to us. Last I checked, there were eight of those. Quite a number have been selected. I think we may be up to 50 selected. That sounds like too many. There are quite a number selected.

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There have been eight so far where we now have production dose reconstruction and a duplicate that we can do comparisons. We are preparing what we are going essentially an assessment report. going to start assessing these in blocks, write a formal assessment report of what did we learn from these comparisons that then we will be sharing with the Dose Reconstruction Subcommittee.

We want to do these fairly frequently at the start. We may go to a less frequent formal assessment kind of document later on, but I don't want these to sit around for six months because we are waiting to get a bunch of them to do. We want to start doing this very frequently.

Just informally, we have seen in these first eight -- one of the items we have seen is they tend to be biased toward AWE dose reconstructions. Now the reason for that is that AWE dose reconstructions are not

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typically done by ORAU.

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typically done They are of contractor health contractors, а set physicists that work essentially in our midst. There are three contract health physicists that work in our building. They do much of the AWE work and much of the AWE reconstruction, plus you don't have to ask for DOE exposure history on an AWE. You don't have that part of the process.

So those tend to get done on a more rapid turnaround. So they think those production ones came in first. They tended to come in first. So we tend to have more than you would expect AWE dose reconstructions in these first eight, because we can start work on the claim as soon as it comes in, in terms of the -- well, once we get -- since we don't have to wait for a DOE response.

What we see is there are some variations in the overestimating expedited processes that were used in those. Nothing in

particular came out of those.

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One of the claims we did get, we identified that there is some lack of clarity in instruction in a Site Profile. This is not an AWE one, I don't believe. This had to do with there was some lack of clarity in how to interpret the Site Profile and individual exposure record bioassay report, particularly in interpreting limited protection on bioassay that led to a fairly significant difference in dose reconstruction from the duplicate to the production.

We have concluded that the production was the one that was done one correctly. So we just need to work now on the clarity of the instruction to make sure that everybody is doing it appropriately. Then there may be something further to follow up, did all the production developed production dose reconstructions get You know, the one we have looked at got done the right way. Have they all been

done the right way, given the apparent lack of clarity in the instruction.

So those are the kinds of things we expect to learn. That is why we want to look at these very quickly as they come out, so these issues don't hang out there for a long time, and that we start to do these remedies pretty quick.

We will be dealing with the Dose Reconstruction Subcommittee pretty closely with this, and when we have the assessment report, we will provide a detailed report to the Dose Reconstruction Subcommittee when that is ready, and we would certainly expect to have it ready well in advance of their next meeting, which I believe is the end of March. Isn't that true, the last couple of days in March?

So we would expect to have that assessment report to the Dose Reconstruction Subcommittee for discussion at their end of March meeting.

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I don't believe I have any other news other than that, that comes to mind. I am going into my statistics on my slides. So I will be glad to answer any questions, either about the statistics slides or what I have covered so far in the meeting. Yes, Paul?

MEMBER ZIEMER: Stu, it sounded you are doing this quality check mainly on current cases as they come in, or are you? Did I understand that correctly, or are you going back and looking at any of the older completed cases in the same manner?

MR. HINNEFELD: Well, there are activities that are being done on some of the older completed cases as well. What we are trying to do, though, is to keep it with work, because pretty recent dose reconstruction processes have changed a lot over the 10 years of the program, and a lot of things that were done four or five years ago are not done anymore.

So if there is a quality issue

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with a process that you are not using anymore, what we are trying to do is fix what we are doing going forward. Certainly, as the Board reviews dose reconstructions -- so those tend to be historical, somewhat historical at least -- we then follow up from those findings to determine is this a broad issue, and is there look something we need to at population of claims? That has been going on. This is sort of to make

This is sort of to make the processes we are using now as we go forward, to make sure those were appropriate and clear.

MEMBER ZIEMER: Just to follow up on that, is your group attempting to get a good distribution of cases over sites and types of cancers, sort of parallel to what the Dose Reconstruction Subcommittee is doing? How are you selecting these cases?

MR. HINNEFELD: I will have to check the criteria. I don't know, speaking right here today. I know that the application selects the cases. I don't know if it is

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strictly a random pull or whether it is sort 1 2 of a stratified and whether it has particular 3 selection criteria. I don't know. 4 MEMBER ZIEMER: Thank you. CHAIRMAN MELIUS: Anybody else? 5 Ι 6 have a couple of questions, Stu. I am looking at your statistics slide on submittals versus 7 production. I am just curious. I can't tell 8 is that is fiscal year 2012 or calendar year. 9 10 MR. HINNEFELD: Those are fiscal 11 quarters. CHAIRMAN MELIUS: So it seems to 12 13 be falling, production falling off there. There is a little MR. HINNEFELD: 14 15 Yes, production has come down recently, 16 and that is intentional. We have gotten to the point where the backlog of claims is 17 essentially done. We are getting claims done 18 19 in about nine months, which is the objective. 20 certain categories of claims, we getting done quicker. 21

On the other hand, though, whereas

that sort of backlog has sort of been tamed, as long as we don't let it get out of control again, we have a significant backlog on the technical work for the Board, SEC reviews that have been going on, Site Profile reviews where either the discussion has been going on or the discussion hasn't been joined particularly, largely waiting for us.

So the backlog that we need to work on now is those bodies of work, the SEC work and the Site Profile work. So there has been an intentional shift of the resources of our contractor from dose reconstruction to those activities.

So, yes, that was an intentional drop in the production rate.

CHAIRMAN MELIUS: Some of us were talking earlier and saying that there is an issue with our dose reconstruction reviews and the amount of resources available for them. Your response, I believe, if I understood correctly, that our Dose Reconstruction Review

1 Subcommittee is, what, about eighth set or 2 ninth set of reviews, and our contractor is --3 what, you are working on the 16th or something The 15th? like that? 4 5 15th, MR. HINNEFELD: The Ι 6 think, yes. 7 CHAIRMAN MELIUS: I was trying to get all this to -- how much is a resource 8 How do we sort of -- and then, with 9 issue? 10 your increased efforts on sort of QA/QC, how do we get the resources involved with these 11 12 efforts sort of coordinated in some way? 13 I am not expecting sort of a full answer to that, but I think it is something we 14 15 need to be talking about here and later, and 16 probably with the Dose Reconstruction Subcommittee. 17 Т think it. 18 MR. HINNEFELD: 19 certainly worth discussing with the Board, 20 because we have no particular preconceived notion of priority. We 21 come up priorities in things to work on. 22 Now then, we

did have a preconceived -- you know, my management was really interested in the dose reconstruction backlog.

not received any kind of a marching order about here is your next thing I really want you to work on. So since these are Board activities, whether it is dose reconstruction review, procedure review or Site Profile or SEC, those are all work we are doing with or for the Board, however you want to look at it.

So I think the Board's prioritization of those activities would inform us. So we are not bringing an argument here for one over the other.

CHAIRMAN MELIUS: I would think, again without sort of knowing all the effort involved in detail, but certainly, the SEC effort should be -- I won't say winding down, but diminishing. We have handled a lot of the large SECs. However, there is, I suspect, a backlog in terms of TBD updates and Site

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Profile, then TBD reviews at a number of these sites to deal with.

We have the question with what we were just talking about with the reconstruction reviews and how to address them. I think both of those are -- those are important, because I think it is one of the major mandates in the law for the Board to do, and I think we need to sort of address that.

I think, as we go through our discussions today and tomorrow, I ask all the Board Members and NIOSH to be thinking about - and SC&A -- thinking sort of about how do we -- what is the best way of sort of triaging our available resources in a way that will address these different mandates and do it as efficiently as possible and as fairly as possible to the claimants that are out there.

I don't know if any other Board Members have thoughts or comments on that at this point, but it is something I think we need to talk about. On top of that, we have

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the 10-year issues to deal with, some of which, I think, will require some effort, but also are intertwined in how we approach dose reconstruction and SEC issues also. So a lot of work there to do.

MR. HINNEFELD: Yes, there is.

CHAIRMAN MELIUS: I have one other question. That is regarding the DOE response to a request for exposure records, and the slide is, of January 31st, had 267 outstanding requests and 44 that are more than 60 days.

I know there is an issue with LANL that we will talk about a little bit later with Greg, but are there other sites where there are particular problems at this point?

MR. HINNEFELD: The problem sites are sort of dynamic, like you will have a problem for a while at the site, and then they will catch up, and they will be good. So today, I don't know that there is any particular site that is a problem, like you have mentioned LANL, which, on and off, there

have been issues there.

Sometimes the issues are with data capture for investigation, and a site may be doing fine with individual exposure history responses, but the data capture stuff is an issue, and sometimes they have trouble with individual exposure requests.

I believe Brookhaven is not problematic with exposure history requests. They were for a while. I believe they have now remedied that. So I don't know of any sites right now that are raising enough information to rise to my level of concern.

CHAIRMAN MELIUS: Greg, when you give your talk, we will ask questions.

Any other Board Members have questions for Stu? We will do a conflict of interest review, and everybody is quiet for the rest of the day. Okay, thank you, Stu.

Next, Jeff Kotsch from Department of Labor will give us a program update. We had asked Jeff to also update us in a little

bit more detail than usual on the outreach program.

MR. KATZ: While we are waiting, just listening on the line I noticed some people joined after we got started, and we

people joined after we got started, and we gave instructions to people listening on the phone to please mute your phones. If you

don't have a mute button, press \*6, and that

will mute your phone. Thank you.

MR. KOTSCH: Good morning. I am

Jeff Kotsch with the Department of Labor.

Just to follow on what Stu was saying earlier, we have the implementation of the new CLL policy, the change to the Part 81, and as the DOL portion we are writing a bulletin to implement that, to exchange lists with NIOSH on cases that we consider are affected by that.

Obviously, there were cases that never went to NIOSH that were simply CLL as the sole cancer. So we will be sending those back, essentially real brain cases that were

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denied previously, sending those along with the cases that we have looked at with NIOSH that had CLL with another cancer but were denied.

I thought I saw a number that was in the realm of 500 of total for everything. That may be high, but whatever it is. It is somewhere up in that range. It is not insignificant as far as our activity as far as reopening and resubmitting those things. So that is -- again, that becomes effective March seventh.

Just a quick overview: there are some follow-on slides to the Act and the requirements of the Act, but they are in the back of the attachment, and they are not really addressed during the -- in the back of the handout that is back there, but we won't really go through those slides today.

Just quickly, the summary of the Act is Part B and Part D were enacted in October 2000. Part B is the portion that is

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basically of interest here, the mandatory federal entitlement which is run by the Department of Labor. Part D was the portion run by DOE, which in October 2004 the Act was amended, and that part became Part E and transferred to the Department of Labor.

To date, roughly, as of January 16th of this year we have had 150,000 cases filed, with a little over \$7.7 billion in total compensation, and there you see the agencies that are involved overall in the Act Labor, Energy, Health and Human Services, and Department of Justice for the RECA portion.

This is just the pie chart we always send up for the Part B cases filed and how they are essentially dispositioned, and 37 percent going through the NIOSH track, and you see the other distributions, the other primarily being the portion labeled other, being beryllium, product beryllium, silicosis, and things like that.

36,500 cases have been referred to

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NIOSH for dose reconstruction, and we are showing 34,539 returned that are currently at DOL. About 30,300 had dose reconstructions, and about 4,200 without dose reconstructions.

And then we are showing -- and again, these numbers never seem to agree ultimately because of some of the disparities in our tracking systems. About 1961 cases are currently at NIOSH, 1,413 as initial referrals and 548 as reworks.

This is our standing slide for the status of dose reconstructions and the distribution of final approvals and final denials. We have 16,620 final denials and 8,628 final approvals, based on dose reconstructions. That is 34 percent approval.

This is just a summary of the Part B cancer cases with final decision to accept. Just going through some of them: Accepted dose reconstruction cases, 8,095 for 11,424 payees. Payees is always greater than the number of actual claims or cases, because

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there are generally more than one claimant or survivor in a particular case.

So for accepted cases, that is \$1.2 billion in compensation. Accepted SEC cases is about 14,818 for about \$2.2 billion in compensation. Going down to the bottom line, the totals for all of the accepted, 23,446 cases for \$3.4 billion in compensation.

This is just the Part B summary decisions for final for all covered 34,858 final decisions applications, for 24,362 final decisions for approval and denial, and you see the breakdown beyond that as far as whether it is a PoC less than 50, eligibility survivors medical or or information which was insufficient to support the claim.

This is just the running bar chart by month for new Part B cases received by Labor. Running in the early part of that year around 400 per month, and down slightly but still probably averaging either in the high

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300s or low 400s, fairly steady still.

The next slide is just the referrals to NIOSH over the past year, maybe a slightly downward trend, but still running probably in the mid-200s to upper 200s per month. Again, the difference is the ones that we take off the top as far as automatic SEC --existing SEC Classes or chronic relief for silicosis, things like that.

This slide is the top four work sites generating new Part B cases. We just took this data for the first quarter of this fiscal year, which is October 2011 through December of 2011.

So the four that we are showing is Sandia National Lab, 139 new claims; Hanford, 107 new ones; Y-12 plant, 102; and Savannah River, 90 new claims.

As far as -- Jim had asked for an outreach update. In response to the new SECs, during fiscal year 2012 and to date, we have had three town hall meetings, and traveling

resource centers were conducted for Sandia National Labs. That was November 1st of last year, GE Evendale in Ohio. That was November 2nd, and the Y-12 plant on January 18th of this year.

The upcoming SEC town hall meetings and traveling resource centers that are scheduled for Pantex Plant for March 14th, or tentatively for Linde Ceramics in April of 2012, and Savannah River in either April or May 2012. I gave the website there, DOL's website for the address, if you want to check upcoming events.

In the case of smaller SECs, press releases are issued. I don't have specific sites, but I know that October 13th of last year they sent out press releases in Wisconsin and Ohio, and February 1st of this year they sent out press releases in New Jersey and California. I don't know the specific sites, though. That was related to this slide, actually, outreach to covered facilities with

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50 or less claims, where they have identified, focusing on some of the effort of sites where there are 50 or less fewer claimants. Those two press releases I talked about were focusing on those, primarily. The bulk of those are AWE sites.

Efforts are concentrated to notify individuals who worked at these facilities, present them information far and as potential benefits of the Act through issuance of press releases, reaching out to unions, local government, other stakeholders, and utilizing as much as possible the staffs of our resource centers.

I don't know if Stu mentioned it, but I know Greg usually mentions the Joint Outreach Task Group. There you see the membership. It is Labor with our Ombudsman, NIOSH with their Ombudsman, and the DOE Former Workers Medical Screening Program.

This is just a summary of the 2011 town hall meetings that they had at Kansas

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City Plant in October of last year, Oak Ridge in April -- I'm sorry, October of 2010 -- Oak Ridge in April of 2011, Savannah River in May of 2011, and Fermi National Accelerator Lab and Argonne East on June 7th. I think they are still working on finalizing the schedule for this year.

These are just the standard slides we put together for statistics for either local facilities or facilities that are on the agenda during the two-day meeting. I am just going to the last slide, the three local one is Lawrence Berkeley. You see 713 Part B and E cases or claims. We have had 150 Part B approvals, 148 Part E approvals for a total of \$34.2 million for total compensation bill Stanford medical payments. Linear Accelerator had 121 Part B and  $\mathbf{E}$ There were 10 Part B approvals and Then Lawrence approvals, for \$2.9 million. Livermore National Lab, 2,937 Part B and E claims, 745 approvals for Part B, 661 for Part

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E, for a total of \$160.3 million.

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Then like I said, beyond that for the handout there are some other statistics. There is some other background. Are there any questions?

CHAIRMAN MELIUS: Yes. Dave?

MEMBER RICHARDSON: I had a couple of questions, I guess, about the outreach One was: This is partly spurred by issues. continued surprise bу the number particularly facilities, these facilities, when I feel like I have made kind of a considered effort to try and understand the complex, and yet I clearly don't. I was surprised, kind of, to come across announcement that there were over a dozen new facilities added to the list over the last month or so, if I am correct, several of them here in California.

It made me realize, if I can't keep track of who potentially is a claimant or what is considered a covered facility, how

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difficult it would be for many people who are 1 2 former workers, and particularly people who 3 are not employees of private contractors. So it seems like the work that you 4 5 are doing with the Joint Task Group is very 6 important for people to understand their 7 eligibility for the program. So that gets at a starting point as background. 8 like Ιt looks Labor is 9 not 10 represented on the Task Group right now. that correct? 11 12 No, Labor is there. MR. KOTSCH: Is it not included on the slide? 13 DEEOIC -that is our division. 14 15 MEMBER RICHARDSON: Oh, I 16 mean Department of Labor. I mean organized labor. 17 18 MR. LEWIS: Ι would say, 19 indirectly, yes, our Former Worker Programs 20 are involved, depending on what area we are in and what particular Former Worker Program is 21 22 involved.

MEMBER RICHARDSON: I guess I have been -- I have had some conversations lately that have led me to think, although I know there is a lot of effort being done to kind of publicize the program, it still seems that there are lots of opportunities for people not to recognize. I was wondering if there are other thoughts about ways to kind of spur that. That was one question. Does this group have to be -- you know, is there a restriction in some sense on who sits at the table at those kind of --

MR. KOTSCH: I have to admit, I am not that familiar with the Task Group as far as its -- I don't know exactly how it is structured. I know it is structured with federal constituents, but I don't know what else it entails as far as who it can include.

MEMBER RICHARDSON: Its mission, though, is to -- or you could help me to understand its mission. Is it to kind of stimulate new ideas for how outreach can be

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done most effectively?

MR. KOTSCH; Yes, I think that is probably part of it. Part of it was just the coordination effort between the three agencies to make sure that they were somewhat coordinated in their efforts for outreach and, certainly, yes, they would look at that.

I know they are always looking for -- again, I am not that intimately familiar with the actual group itself, but I assume they are always looking for ways to get out there, because we know there are some -- I know there were a couple of facilities in New Jersey that were so small, they were literally -- there were just a couple of claimants. It was really hard to just even find anybody else that worked for those old companies that even -- It is just no longer there.

MEMBER RICHARDSON: Right.

MS. LIN: Can I just ask a question. Dr. Richardson, are you asking for membership to the Joint Outreach Task Force,

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individuals or entity outside of the federal 1 2 government? 3 MEMBER RICHARDSON: Yes. One of 4 the questions was: Was there representation 5 Might they bring ideas, contacts, there? 6 resources for other ways of identifying people 7 who might not be -- I mean, it wouldn't be obvious to me right now sitting at the table 8 what those would be, but --9 10 MS. LIN: As of now, this is an 11 interagency task force. If we are inviting 12 outside entity outside the federal government, 13 they change the characteristic of that group. It might actually be -- it might actually 14 become a federal advisory committee. 15 16 There is actually different ramifications that might involve or implicate. 17 18 So, obviously, it is something that 19 consider, but we will definitely take it. 20 MEMBER RICHARDSON: Clearly, don't appreciate how bizarre the workings of 21 22 government are that you can't elicit

1	information.
2	CHAIRMAN MELIUS: Henry?
3	MEMBER ANDERSON: I was interested
4	in there's over 6,200 where the medical claim
5	could be substantiated. What are the problems
6	there?
7	MR. KOTSCH: I think the general
8	issues there are just that there is not
9	specific medical information, a pathology
10	report or a medical report or just anything.
11	There is just the claim of a particular
12	illness or cancer, but it is not substantiated
13	in any particular way.
14	We have fairly generous
15	requirements as far as what we require for
16	medical information, but some of the main
17	things are pathology reports for the cancers
18	and things like that. We will take other
19	things in lieu of that as far as medical.
20	MEMBER ANDERSON; It just seemed
21	to be a substantial number.
22	MR. KOTSCH: Well, considering the

small number, it is still significant.

Likewise, we sometimes have an issue with employment, too. They may just allege employment but nothing else.

CHAIRMAN MELIUS: Just a lot of medical records get destroyed now, with hospital mergers and medical offices going out, and some of these cases go back so far.

MR. KOTSCH: Yes. The requirements for records retention, obviously, varies by state, and it is not very lengthy, and I think sometimes it is only like 20 or 30 years.

MEMBER ANDERSON: I know the medical record. Just knowing pathologists, they never throw anything away. So the written report may be gone, but if you know where it was -- I mean, how one goes about searching for those records. Frequently, the slides of the tissues, if such were ever made -- some people will die or, if you don't accept the death certificate as saying, you

know, it is the cancer.

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I am just curious as to -- I can see the frustration in the families, that you know what Dad died of or where he was hospitalized, and all of a sudden you can't get it.

And the hospital CHAIRMAN MELIUS: is gone. That is probably the -- I think you are right. If the hospital is intact, so to speak, then there is usually some someplace that you can track down, but it is when they have disappeared that it is hard, or when it is, you know, so and so went in the hospital, and they thought -- they weren't sure what was wrong, might have been cancer, then died. Yes. Ιt is difficult for a survivor who may live on the other side of the country and so forth. It is really -- it can be quite difficult.

Paul?

MEMBER ZIEMER: Jeff, on the CLL cases now that will be reopened, my question

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1	is: does the Department of Labor notify those
2	claimants that their case is going to be
3	reopened and thereby raise their hopes of a
4	settlement or do you go ahead and relook at it
5	and, if it is positive, let them know? What
6	is the process?
7	MR. KOTSCH: By the actual process
8	of reopening, they have to be notified. They
9	get a formal piece of paper that says, you
10	know, Department of Labor is reopening your
11	claim, and then whatever we are doing. In
12	this case, we are
13	MEMBER ZIEMER: And you explain
14	why.
15	MR. KOTSCH: Yes.
16	MEMBER ZIEMER: Thank you.
17	MR. KOTSCH: Anytime we reopen a
18	case, whether it is for a rework or something
19	else, if it has to be reopened, there is
20	obviously in the claimant's interest whether -
21	- I don't know. We never know the outcome of
22	those things until they are done. I can't

remember if there is language in there as far as -- there may not be. I am not sure, but as far as what they -- I mean, we are not going to presuppose what the outcome is.

MEMBER ZIEMER: Thank you. Now one unrelated question. The Worker Outreach Programs -- you did one at GE Evandale in Cincinnati, I noticed, a site for which we had concerns about the size of the claimant population. Can you give us some idea or do you know what kind of turnout there was for that worker outreach meeting?

MR. KOTSCH: I don't know. Was there anybody from -- Stu may have been there, or somebody there.

MR. HINNEFELD: I happened to attend those, since they were in town. So I am speaking from memory now. There were two sessions. There was a difference between the two. In fact, I think at one -- I think that was the place where nobody showed up for the second one. It was just like one person, and

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was mainly interested in her particular claim, and so she was dealt with by other people. I don't think the second session even occurred.

The first one, I want to say, is 30 to 50 people were in the room for that one, if I remember correctly.

MEMBER ZIEMER: It is kind of an interesting phenomenon, to follow up on Dr. Richardson's comment. Here is a site where you had a particular effort, I guess, to announce the program and the availability of compensation, and you got a lot of no-shows, it sounds like, because I think we estimated that that was a pretty large Work Group that could be impacted.

MR. HINNEFELD: Certainly, a large employer, a large set of employees. I don't know, other than to say that the advertisement was about this particular work. Air Force Plant 36, whatever it was called, and people may have read the -- I don't know how the publication went.

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MEMBER ZIEMER: Well, see, that makes me wonder how -- are we doing something like -- a lot of legal notices are just that. They meet legal requirements, but the people you want to reach don't see them.

MR. HINNEFELD: I really don't know. We go attend these -- or this was an SEC essentially announcement.

MEMBER ZIEMER: But that would be an issue for the Joint Task Group, that kind of thing, to discuss as to how you go about that.

MR. LEWIS: And I think there is a little bit of a difference for the outreach meetings on how we are able to connect with these folks, because with a place like GE Evandale, when it is a private company, it was more on the AWE side, we don't have the list; whereas, with -- you know, if at all possible, and I was going to mention, at one of the Joint Outreach Task Group meetings we are working on for this coming year is for this

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area, for the Bay area, and what we are working on right now is getting updated roster lists from the sites, SLAC, Berkeley, and Livermore.

So we are hoping to get -- we get big lists of former workers. We try to mail to as many -- You know, we get the ZIP Codes and try to mail to as many local folks as we can. So that tends to generate a bigger attendance; whereas, if we don't have those lists and have to go with an ad in the paper, a press release, something like that, that depends on what gets picked up, when it comes out, who is paying attention that day, how big the market is, all those kind of things.

We try to -- in the Joint Outreach Task Group meetings, we try to tailor our outreach given those realities to try to get as many people there as many people there as possible.

Now with the SEC meetings, you have to do it for that site, and you are only

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able to kind of come up with whatever tools we have. I don't want to speak for DOL, of course, but there is a bit of a difference, depending on the site.

MR. KOTSCH: Yes, that is a general summary. If we have union contacts at a particular site, we will use them. I know our outreach people try to take any avenue that they are aware of as far as getting the word out.

# CHAIRMAN MELIUS: Wanda?

The discussion MEMBER MUNN: surprises me a little bit, probably because it is contrary to my personal observation and personal experience. I have not encountered any of these outreach activities that have not been, certainly, heavily involved in the notification process with organized labor, and the advertisements that I have seen have not sections all. The been in legal at advertisements that I have seen in a number of newspapers across the United States are always

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very colorful, very clear, and occupy a pretty good space. They are not just a tiny little ad. They are good-sized ads, and they occur more than once in localized newspapers.

So I haven't attended very many of those outreach meetings, but many that I have been aware of were held in union halls, and many informational meetings were arranged by organized labor, and then operated as sort of a joint activity with DOL.

So it surprises that this me discussion occurs for because, from some perspectives, the heaviest of all representation at these meetings is a union person, and a couple that I have attended have been essentially led jointly by DOL people and by organized labor people.

So I guess I can understand your concern, David, but I just felt it was necessary to comment that I cannot imagine, for example, in a place like GE that the organization was not involved in distributing

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information. It just doesn't jibe with the experience that has been observed elsewhere.

CHAIRMAN MELIUS: Brad?

MEMBER CLAWSON: Well, after listening to Wanda's comment, I just wanted to make sure. The Department of Labor, I am sure, sees this, too, that in many cases, many places it is the DOL outreach person or -- you know, you can go to different cities, and some of them, there are so many they are really advertised very well, and other ones it isn't. It is a lot the point of contact and so forth.

One of the sites is Pantex where you have people that are really involved and have a good communication, and this is, I think, what Mr. Richardson was referring to, the communication between the organized labors that are there in some places are different than in others.

In my personal opinion of going to several of them, some of them were really well

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done, like you said, but other ones, the information didn't get out there. It wasn't as well informed as other ones. They are polar opposites in some places on it.

This is where, I think, Mr. Richardson was talking about using organized labor, but a lot of these sites didn't. Their organized labor department has gone away. It is basically falling onto retired people, and many of those do wonderful, wonderful jobs and they have a good communication, but also the outreach people that are involved in it is a big tool that sometimes really works well and sometimes doesn't.

CHAIRMAN MELIUS: Jeff, I have one question. I think that, for the people with claimants with CLL you have in the system, you can notify them, but is there going to be an effort this year to try to do a more general outreach for those that may have gone to one of these public meetings or talked to people in your centers or whatever about filing a

claim and been told, well, no, you are not eligible, CLL isn't covered.

I think it would be helpful if there was some effort to do that. I think that may be one of the problems also, I think, with some of these sites. People don't think that they are covered or they have been informed they are not covered or there is not -- or whatever. Something had not happened at that site yet, or whatever, only covered certain people.

These are the people that are hard to reach. The ones that have filed claims, you can go back to, and that is good. But I think some emphasis this year on at least clarifying for the people that may have not thought they were eligible and are now eligible.

MR. KOTSCH: That is a good point, and I think that will done. I am not sure of the form, but you are right. After 10 years of saying you are not covered, you are right,

we need to inform them that now you are, there has been a change.

CHAIRMAN MELIUS: David?

MEMBER RICHARDSON: Just to wrap this up, and I don't do this as a labor -organized labor versus other people, balance or anything. I was coming at this from the imagining a perspective of disease arises in a population, and what we are seeing are a subset of those which become claims, and the government has kind of offered a service program to all those people who are affected by a given disease, and we want to think about how best to serve all those people who have experienced this disease.

What is driving some people to end up in the pool which are those which have filed claims versus, which I think we would all acknowledge, there are other instances of disease which have occurred where those people have not filed claims.

There, obviously, are a number of

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barriers somehow to people getting entered into a government system which is there to assist them. So this may be communication. It may be a changing message. It may be lots of different social, psychosocial processes which leads some people to end up in a program and some people not.

That is what I was trying to think about. What are those? How do you lower those barriers so that people understand the resources available to them and are well served by the program?

I don't know what that is. One of my suggestions was to involve more of the people who are potential claimants and get their perspective on what they perceive as the barriers to entering into the program, and there may be other ideas and expertise about how to do that, but all I'm saying is I think that is a very important issue.

I have some suspicion that there remain obstacles to people entering into the

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1	program and finding the assistance that they
2	are entitled to. So I would just like to keep
3	it on the burner.
4	CHAIRMAN MELIUS: Thanks, Dave.
5	Any other comments or questions? If not,
6	thank you, Jeff, for the update.
7	MR. KOTSCH: Thank you.
8	CHAIRMAN MELIUS: Our next update
9	is from the, last but not least, Department of
10	Energy.
11	MR. LEWIS: This took a little
12	while to load earlier. I don't really know
13	why, but I did want to address a couple of
14	things while this is loading that I want to
15	address.
16	I know you mentioned briefly, Dr.
17	Melius, LANL, and I have a slide later on, and
18	I would be glad to talk about that and answer
19	questions.
20	The other thing you mentioned, I
21	think it showed something like 40-something of
22	the late claims, and as Stu said, those kind

of come and go, depending on circumstances, and usually they are associated with a few specific sites. I am going to check with NIOSH afterward and see exactly where those are, but the one site that immediately popped into my head is Sandia.

I think you saw in Jeff's slide, Sandia had something like 139, and they were the highest number of recently received claims at DOL and, typically, the other three on that list are kind of always there. I think it was Savannah River, Y-12, and maybe Hanford. Those three are -- they are always in the top five in terms of number of claims. Sandia typically is not.

So 139 claims for Sandia is probably five to six times what they typically get, and in addition, they are also still supporting ongoing -- even though that initial period of SEC was granted, there has still been ongoing research into the remainder of the period.

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So they are kind of getting hit both with additional claims as well as this ongoing research. So I think that they have staffed up or brought in some additional kind of temporary people to help handle that, but that is the one claimant.

I would also believe -- and I don't know how it factors in number-wise, but similarly, Kansas City got -- over the last year they got probably three to four times the claims that they typically get. So I think that they had also hired an additional person or brought on kind of a part-time staffer to help eliminate the backlog.

So those are the two sites that pop into my head, and a lot of times it is because of something like that, either --well, unfortunately, sometimes it can be due to funding. I don't believe we have any of that even through the CR this year, but the other major driver on that is the SECs and large influx of claims.

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CHAIRMAN MELIUS: I think that
Kansas City was an outreach. Wasn't that on
Jeff's list, I thought?

MR. LEWIS: Yes.

CHAIRMAN MELIUS: They probably do that. Actually, I think Sam Glover was out at Sandia handing out claim forms as he wandered around down there or something.

MR. LEWIS: Yes.

CHAIRMAN MELIUS: It accounts for about 120 of the 139 or something.

just one MR. LEWIS: Then thing, before I get started, as far as the Maybe I should have been stronger, outreach. but with the former worker programs, typically, at least for the Joint Outreach Task Group -- I know both NIOSH and DOL also do their own reach, but for the Joint Outreach Task Group, we have, I think, monthly or every couple of months we have conference calls with the Joint Outreach Task Group, and on almost every one of those calls, there is typically a

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representative from USW, United Steelworkers, as well as the building trades, CPWR, and I think occasionally some others as well, but I know at least those two are on almost every single call, and then attend the meetings that have to do with their specific programs. They don't necessarily attend all of them, but usually one of those two is typically there.

All right. I will go ahead with my slide show. I am Greg Lewis. I am the Director of the Office of Worker Screening and Compensation Support at the Department of Energy.

Our core mandate is to work on behalf of program claimants to ensure that all available worker and facility records are provided to DOL, NIOSH and the Advisory Board.

We have three main responsibilities. We respond to individual requests for information from DOL and NIOSH for employment verification, dose reconstruction and other exposure records.

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The second thing is to provide support and assistance on large-scale records research projects like the NIOSH SEC projects, TBD updates, the Department of Labor site exposure matrix, things like that.

Then the third, which is somewhat smaller but equally important, is to conduct research on issues related to their covered facility designation. So the puncture sites, the uranium mining and milling sites that were just added, we were involved with that review, and I think are still providing some background information on those sites.

Before I talk about each of those three responsibilities in more detail, I just want to kind of talk about how we do business at DOE with respect to the EEOICPA program. Everything in terms of providing records and information runs through our sites, and in each one of these sites we have a designated point of contact for the EEOICPA program, and these PoCs are vital for our program. They

are the backbone of our program, and they are really what allows us to get you all the information you need.

So these PoCs conduct the research activities. They set up visits, interviews, make sure that the clearances and access are there to get on site. They work to identify the right subject matter experts, and also kind of manage the day to day process of responding to these claims in a timely fashion.

individual the records For requests, we do three types of requests, again the employment verifications, the dose records or dose requests for NIOSH, and what we call a document acquisition request or DAR, which is a request from DOL for basically all other exposure information, medical records, industrial hygiene, anything related individual might exposures that an experienced on site.

Then if you look at the numbers,

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we have actually recently revised our numbers. We went back. So I think, if you look at previous presentations that I have done, the FY 2011 number and even 2010 here are both lower than what we have said in the past. I think we were up around 17 or 18 in the past.

What we realize -- we were going back through our numbers and realized that at the Oak Ridge facility -- and I guess my next slides speaks to this as well, but our numbers typically don't match DOL and NIOSH, because often workers worked at multiple sites. They might have gone to visit sites, workers, for example, in this area at Livermore, many of which would have gone to the Nevada Test Site for a period of time while they were working on a particular shot, things like that.

So for one individual, we may have to go to two or three sites to gather the requests. So we count that as two or three separate requests, because the sites has to pull the information.

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Well, at Oak Ridge, what we call Oak Ridge really consisted of five sites, the three gaseous diffusion plants, and then Y-12 and Oak Ridge National Lab. So if someone worked at all five of those, it would count as five requests.

Well, we were also counting -there was a separate records center there in
the Oak Ridge Operations Office. So for many
individuals, especially for those that worked
in the older period of time, the request will
go to that Oak Ridge Records Center.

So I didn't realize it at first, but we were counting that as a separate request, because it was going to a separate place. But when we looked at that type of request, it was in its own site, and it was also a much lower level of effort. So we kind of felt like we were double-counting.

So we went back and took that out of what we counted. Actually, it makes our numbers -- it makes a little bit more sense,

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actually, because when you look at it, over the past two years we have been very close. I didn't put the exact number. We are still finishing this data scrub, but it is very close to 16,000 per year, and then this year we are still on target for about 16,000. So the numbers have actually been very consistent over the last couple of years.

Then I mentioned this before, but for multiple sites, we -- For one individual, we may go to multiple sites, and then within a site we often go to multiple divisions or areas within the site, and resulting in records packages that can be hundreds of pages long for one individual. So it can be a complicated process out of these sites.

The second main function that we have at the DOE is to support the large-scale records research projects. These are driven by NIOSH and DOL. So it does keep us on our toes, trying to react and make sure that, when these projects start or as they come up, that

we make sure that the site has the resources and manpower in place and that there is funding that enables them to support these efforts.

These projects can take years and cost hundreds of thousands of dollars. So it is sometimes difficult logistically to support.

We also do have to review -- not everything, but at certain sites and for certain records, we do have to review documents for classification. This is also a time-consuming process. We have reviewed millions of pages so far, and we do everything we can to get these back in a timely manner.

This is a list of some of the projects that we have been supporting recently. There is more than that, but I just kind of picked six of the ones that we have been recently working on.

At Sandia, as I had mentioned earlier, in addition to getting a large influx

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of claims, we also supported five site visits in 2011 for records review, worker interviews and data capture.

While they are working on the Sandia SEC, there has also been request for Ross Aviation information and also for Medina and Clarksville records, because Sandia, along with Pantex, ended up with the majority of the Medina and Clarksville information, once those two facilities were closed.

also just recently held We facilitated a meeting or meeting Headquarters in Germantown to look into the Sandia documents, as well few other as а subjects.

Alamos. Ι know that a So Los question had been raised earlier with Los Alamos, and recently, just in the last month, I have been fairly involved working with both site well their the as as NIOSH and contractor, trying to resolve issues as far as getting the right information and targeting

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the right information.

I will say, it has been somewhat slow, but being involved in the process, LANL has been responsive. It hasn't been an issue where they are not responding or refusing to respond. It has been an issue of a lot of back and forth trying to identify the right information.

There had been requests made. Then the site came back and said, well, this is too broad; we don't know what they are asking for, we can't provide this. So then NIOSH or the contractor would either have to make a more targeted request or talk to the site to make sure to explain exactly what they were looking for more clearly, so the site could actually pull the records and facilitate the visit.

I am happy to say that, as of yesterday, there are three researchers on site down at Los Alamos reviewing documents, and I did exchange emails with Cheryl Kirkwood at

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ORAU just today, and she said that it does seem like they are getting what they needed, and the documents that they wanted to see are there.

So I believe, hopefully, at the end of the week, it will have been a successful visit, and I am hoping that that will resolve most of the concern with Los Alamos, but if that is not the case, there is still more work to be done, I would be glad to get that going as soon as possible.

CHAIRMAN MELIUS: Because I think, as you know, we have our next meeting -- inperson meeting of the Board out that way in
June, and we have an active SEC evaluation out
there, and we now have congressional
representatives inquiring what is taking so
long.

MR. LEWIS: Like I said, I believe, based on my conversations with the NIOSH team lead, if they are able to get what they think they can get during this visit,

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they think that that is going to be the last visit that they need to pull together the report. Of course, these things are always kind of in flux. Depending on what they find this week, they may need to pull that string a we will do little bit further, but yes, everything we can to make sure that they have the information by the next -- well in advance of the next meeting. CHAIRMAN MELIUS: No. we appreciate that, and we will keep after NIOSH

and whoever we need to keep after.

MR. LEWIS: Then just the last one that I was going to talk about is the Pinellas Plant. At the last Advisory Board meeting in Tampa -- I think that was in December -- there facilitate had been а request to some interviews with former Pinellas workers.

We really tried to get that -- to secure a venue to do that in December. because of the nature of these interviews, it needed to be a classified location. Because

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1	the site is closed, DOE doesn't have a
2	suitable location in the area.
3	So I think, initially, we were
4	working with the there is a big military
5	base near there, a number of commands, and
6	that had been we just weren't able to do
7	that. There were a number of issues in terms
8	of getting the right venue, and also getting
9	access to the base was very difficult.
10	So after that meeting, we went
11	back and were able to work with the FBI and
12	get a venue, and the interview was held in
13	January. So I think that we can cross that
14	one off the list.
15	Then as far as document reviews,
16	again with
17	CHAIRMAN MELIUS: Phil, do you
18	want to comment on that? I don't mean to
19	interrupt you, but it is easier if we do
20	MR. LEWIS: Yes, go right ahead.
21	MEMBER SCHOFIELD: On those
22	Pinellas interviews, I want to compliment DOE.

You guys really pulled together a good job, 1 2 and it really was a help to us, and we were 3 able to get a lot done, and I appreciate it. 4 MR. LEWIS: Glad we were able to I wish we could have done it for 5 support. 6 December, but we did the best we could. Well, that was 7 CHAIRMAN MELIUS: hard, and short notice, especially when the 8 facility is not there. I don't know how you 9 10 got people to go to the FBI office. Quickly, with document 11 MR. LEWIS: reviews: many of the final documents that go 12 13 up on the web or that are published in a public venue, we review it at DOE For Official 14 15 Use Only in classifications, data-sensitivity 16 concerns. We do this -- our security plan is 17 really what provides us the -- it sets forth 18 19 the things that we follow, so that is at the 20 link there, and it is on our website. since the last Board meeting in December, 34 21 documents 22 have been submitted DOE to

Headquarters for review. The average turnaround time was eight working days, and I think in certain cases we are able to do it faster when necessary.

Then the third main responsibility the DOE has under the Act is to research and maintain the covered facilities database, of course, along with DOL and NIOSH. We all put together the information we have and, when we realize that there may be an issue with facility coverage, we attempt to make that as accurate as possible.

Then we are always working on initiatives to identify additional records collections or records that either may not be organized in a fashion where we can quickly get them to respond to requests or we may not have realized that they were responsive to these type of EEOICPA records requests.

So one example right now is we are working with our Brookhaven National Lab on developing a more comprehensive list of

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subcontractor companies. We identified some - I believe these are engineering project
files type of records, and we are going to be
going through those project files to identify
the companies, the subcontractor companies,
that were listed as working on those projects,
and we are going to create a list.

So again, it won't identify subcontractor employees, but at least we will identify the additional subcontractor companies that were on site.

Then we have also recently completed our third review of the Department of Labor Site Exposure Matrix database, or matrices -- excuse me. Originally, there was both an internal version of the SEM at DOL and then a public version that had more limited information.

In 2008, DOL came to us and asked us to review the full version of the SEM so they could post it on their website. The initial effort took about a year, and since

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then we have done two follow-on efforts for additional information that they wanted to add to the database, and the most recent review was completed about a month ago, and the new version is up on DOL's website.

Then I just wanted to talk about the Former Worker Medical Screening Program, which is the other program that is managed out The mission of the Former of my office. Worker Program is to identify and for former workers at risk occupational disease and offer them medical screening that can lead to treatment.

The program serves all former workers at all DOE sites. We work with a network of local clinics to make sure that the exam can be made available close to the individual's residence. I think that we have conducted screenings, I believe, in all 50 states and, I think, Canada as well.

The local screening programs for Livermore, Berkeley, and Sandia-Livermore --

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the principal investigator is Dr. Lewis
Pepper, and he is with Queens College, and I
have provided a number there, and it is also
on our handout in back.

Then to finish, I wanted to talk about a recent initiative we have just completed. I think you all should have a wallet-size or slightly bigger than wallet-size card that we gave you all.

This is a project related to beryllium and chronic beryllium disease. About a year, some of our stakeholders came to us and felt like it would be helpful to have more information about beryllium and chronic beryllium disease and sensitivity, both for workers and for their physicians.

So just to give a little bit of background, beryllium is a metal that is used in a number of industries, defense, aerospace, medical, obviously in the weapons complex as well. It has exceptional strength and stability under high heat.

It also has some unique hazards. So it has been recognized as posing an occupational hazard for quite some time, and that it does result in beryllium sensitivity, chronic beryllium disease and lung cancer.

So again, wanted to we put together -- initially, we were working on just putting together a card that an individual could have that both would talk about some of the symptoms they might experience. they worked with beryllium and they have a cough or there is some kind of issue that they have been having, and they are wondering maybe this is connected with beryllium, this might give them some idea of whether it is related to beryllium.

Also, if they were diagnosed with beryllium sensitivity and were having some additional issues, this might give them an idea of whether they should go back and get tested again or maybe that their disease has moved to a chronic beryllium disease. Then

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also, for those with chronic beryllium disease, it provides some information on some of the consequential conditions and illnesses that might result from their CBD or from the treatment of CBD, which is often steroids.

So for this process, we asked six physicians if they would assist us, provide some guidance and background information. The six physicians are Drs. John Balmes, Laurence Fuortes, John McInerney, Lisa Maier, Lee Newman, and Milton Rossman. We believe they are all renowned experts in the field and very qualified and capable.

They also provided us guidance. It was individual guidance. This wasn't a panel or they didn't come to a consensus. There was no voting on what to include. We did want to make sure it was just to assist and guide us and provide some information.

They reviewed available scientific literature and tried to put together some lists of symptoms of CBD, consequential

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conditions of CBD and provide the information in a clear and concise format, something that could be accessed and understood by workers, but it would also be valuable to their physicians; because again, one of the key --

I probably should have mentioned this to start. One of the key reasons that we put this together is we have been hearing that many of the physicians, even in heavily DOE where there might be more involved with beryllium than others, especially in areas with no DOE facility, we have heard that many workers will go in and talk to their physician about beryllium, and their physician never heard of beryllium, have no idea what it is, what it can do, what is CBD.

So we wanted to be able to provide workers with this card so they could bring that card to their physician, and their physician would kind of get that basic information and have a good idea of where they

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might go to get more information because, again, with this program a proper diagnosis is key for the Department of Labor to be able to adjudicate these claims.

So the end result is not only the card that you have sitting in front of you, but also a website. Again, our stakeholders approached us about putting together a card, when but started working with we physicians and gathering information, to put all card, it would have been that on а microfilm.

So what we ended up doing is creating a website to go along with the card, and I think there is a link to the website on that card, although it is not live right now. It should be live within the week. We are making our final preparations, and it is going to be up on our website.

So again, this doesn't directly have impact to this Board or to dose reconstruction, but we know many of you are

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involved out there with workers and are involved with the EEOICPA program, and we think this will be a great resource for workers and their physicians. So if you do check it out in about a week, the website, if you have any feedback for us or suggestions, we would be glad to hear them.

There is a copy of the card that you have sitting in front of you. And that is it.

CHAIRMAN MELIUS: Dave, go ahead.

MEMBER RICHARDSON: I wanted to start with the card and beryllium issue, which I think is great and is really useful. I had one question about the list of consequential illnesses that may result from chronic beryllium disease. I guess I would pose it as a question and whether there was discussion about it.

Lung cancer is not on there, and yet at least some organizations consider beryllium a carcinogen. I don't know if you

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1	consider that beryllium is an established risk
2	factor for beryllium diseases, and beryllium
3	is an established risk factor for certain
4	cancers. I guess the question is, did you
5	think about lung cancer as being something
6	which a physician might want to consider among
7	the consequences?
8	MR. LEWIS: I am going to turn it
9	over to Isaf Al-Nabulsi. She is also of my
10	office, and she really is the one who
11	captained this project.
12	DR. AL-NABULSI: We didn't include
13	it in the card, but it is in our website, and
14	we all know that lung cancer from beryllium
15	exposure depends on the duration of exposure,
16	as well as level of exposure. If we point it
17	out in the card, it will be misleading. So we
18	have it in our website.
19	MEMBER LOCKEY: You almost have to
20	have the fibrosis to be at risk.
21	MEMBER RICHARDSON: Thanks. Could
22	I ask a different question?

CHAIRMAN MELIUS: Sure.

MEMBER RICHARDSON: This goes to the very, very start of the material that you are presenting. DOE has got this huge task in front of them of responding to requests which, I imagine, becomes tiresome, to provide information, and you describe that -- I mean, this is a huge amount of work that you are doing, and it is going to continue for quite a period of time.

You have kind of described the reactive component of what your office is doing, how you are handling these requests. I am wondering if there is a proactive or kind of strategic planning aspect of this which we have not been kind of exposed to, which I could imagine there might be, when you start to think about, well, if you have to keep doing this, are there ways that it could be done simpler.

One of the things that I have been thinking about is, as we have gone to these

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sites, some of the sites, I think, have undertaken incredible efforts, like INEL, to really kind of aggregate their information, index it, and make it much more usable.

DOE in some situations has kind of created the REMS system, which is useful. But it all looks, to me, kind of like decentralized or federal sort of system in which DOE has responsibility yet there is kind of this kind of heterogeneity between they are putting sites and what in, the completeness of it, the time periods that it is covering.

We are going to be talking about Sandia, which seems to me one of the extremes where right now NIOSH -- if I am understanding this, there is records in caves which they can't get, which is the opposite end of the spectrum from this. Is there a strategic plan for it about some way of you beginning to centralize more of the information to make these responses easier?

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MR. LEWIS: That is biq That encompasses a lot, but I will question. do my best to answer it. I would say, to some extent, yes and no. We are always doing things to make the process try to efficient, to improve the records collections when we can.

mention that Brookhaven That is a very small one, but we try example. to -- I have gone out to the sites numerous times over the years trying to get ideas. there is some investment we can put in that will pay off in a number of claims down the have tried to do that road, we wherever possible. So efforts like scanning digitization or indexing records.

We try to do a lot of that out at the sites. You are correct. There is a tremendous of heterogeneity within the sites, and that is kind of by design. That, I think, could be said about anything within DOE because of the nature of the M&O contracts and

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the different sites. There's different contracts. There's different responsibilities. So it is very difficult to make one uniform way of doing things throughout the sites.

There is also a tremendous difference in the records at the sites, both the records management throughout the years and what was kept, so to some extent were -- I always say, we do the best we can to find a record, if it still exists at the site. If it is not there, we are not going to be able to dig it up now, but we do the best we can to find the records that still exist.

Having said that, we also -- my office doesn't manage records throughout the complex. So any sort of effort to centralize all the records or something, that would fall within DOE records management, and I don't know that there is a tremendous interest in centralizing the records, because the sites each have their own responsibilities.

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Again, we try to make it --

MEMBER RICHARDSON: To the extent that that is true, it means that, for the foreseeable future, you are going to go on as you are going on

MR. LEWIS: Well, yes, and I think whether or not the records were centralized, I don't think that that would really address — the major problems are sort of the historical, how the records were kept, and again are they paper, boxes of records, were they indexed to put in a database, do we have them? So some sites have better records than others, and those where we have issues with, it is hard to find them or it is hard to — you know, we don't necessarily have good confidence.

We do the best we can. Again, the major options are indexing records or scanning them and putting them into some sort of electronic database. Oftentimes, especially with older records, indexing them is really the way to go.

When you do the return investment in terms of putting the time in to scan and make them electronic, you end up being able to access them much quicker, but it is a tremendous cost. Whereas, indexing, instead of accessing them in minutes, it might take you a couple of days, but as long as they are indexed and we can find them, for the purposes of this program, I think it meets the So if there are gaps in our records or if there are things that we know there is a of records there that could out responsive to this program, yet they are not indexed or they are not in a mode that is accessible, we address those.

So at this point, I don't believe there are any obvious records collections that we are aware of that would provide a benefit to this program, to these claimants, that we haven't indexed, if we are aware.

Again, it is hard to know. We oftentimes -- we will find collections of

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records where it was labeled in a way that we didn't realize it would be responsive, and then when someone goes in there, they go, oh, look at this, this is a treasure trove of information.

When we find stuff like that, we get it right in the system, and then we also, once we are able to index it and get it into our EEOICPA system, we will go back and check versus old claims to make sure that it is not just the claims going forward, and we will provide that information to NIOSH or DOL. They can reopen those claims as they see fit.

So we are always working on that.

I don't know if that fully answered the question. If you have suggestions or would like to sit down, I would be glad to really get into the details of what we have done and what some of the various sites have.

DR. RICHARDSON: My experience has been, with the passage of time, the ability to retrieve information from some types of

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records gets worse and worse. It becomes harder to locate them. They have become shifted off. The quality of the records themselves begins to degrade.

So at some point I think it might be worth -- if you imagine that this program is going to go on for two decades, it may be worth thinking about doing something other than trusting kind of in a decentralized manner, who would be the various contractors and changing agencies who bear responsibility for maintenance of the records to do more to preserve them.

It is both for this program and it is for --I mean on the individual basis, it makes lots of other things easier. Co-worker models become much easier the more information there is kind of universally that is collected about a site and radiation exposures.

MR. LEWIS: I will say, the POCs at our site are really kind of vital in that regard. When you said records degrade, I

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think in general that is true of records They kind of move on or you collections. retire them. You dispose of them, things like But for EEOICPA purposes, the records that. that come into the fold under EEOICPA and are used to respond to requests, those are both covered under our epi moratorium -- you know, epidemiological records moratorium that was intended originally for studies, but then has also been used to preserve the records.

Then again, as soon as it is in a collection that is used respond to POC makes that those requests, our sure records are certainly not touched if they are degraded in any way. We have actually had that where the records were kind of falling apart, and in that case we scan. So we will do projects, if necessary, but again records do -- the boxed records, if kept in the right way, will last for quite a long time. Some of them are still going since the --

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MR. RICHARDSON: Things like microfiche -- it is tricky.

LEWIS: Ιt is tricky with MR. Where we have had a few issues is microfiche. of the early -- when lot databases. Α started, computerized stuff first and databases, I think technology was changing so quickly. It was evolving, and we have run couple of where into а cases we had information on reels or tapes or cartridges or something and they didn't have a reader at the site.

I think in at least a few cases we were able to dig one up at some other site -you know, had a reader in the basement. We kind of used our network of EEOICPA and POCs and all their records contacts and were able to find it, but we have had a few where there just wasn't the technology to read that, but microfilm and microfiche -- I have not heard any issues.

Most of the time, they will have

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multiple copies. They will have a silver copy, and I'm not sure all the records persons could really get into it, but they will have multiple copies, and a lot of those, microfilm has then been scanned as well. may still use the microfilm сору, but sometimes they will scan it in. It doesn't make it any easier to find. You still have to scroll through, but it does preserve it.

CHAIRMAN MELIUS: I think Hewlett
Packard and other companies made lots of money
by changing their formats and back-up systems
every year, without any backwards
compatibility.

If this is a -- I mean it is an Ι think, that of issue, sort we are and especially encountering, as we start thinking about co-worker models and about more detail and so forth. It sort of does become a limitation, if only a resource limitation of of practical what is available sort limitation. So it might be something that we

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1 should think about and maybe spend a little 2 bit more time on, if you would be willing, 3 Greg, at one of our next upcoming meetings to talk about and think about. 4 5 Yes, I think MR. LEWIS: that 6 would be -- and I would probably want to talk 7 before then to get some more details and exactly, really kind of hash out the issue. 8 CHAIRMAN MELIUS: Okay. Good. 10 Thank you. I have one question, which --David piqued my curiosity. 11 The covered facilities database --12 13 has that been updated recently? When I go to your website, it is hard to tell. 14 You know, we don't 15 MR. LEWIS: 16 have a last update, some easy way to get to a list of what is updated. That information 17 would be in the Federal Register notice. 18 19 covered facility list is kind of an informal easy way to find all 20 is an information, but actual -- the law, 21

speak, in terms of what is covered is on the

9

1	Federal Register notice. I think most of
2	those are posted on the DOL website, I
3	believe.
4	CHAIRMAN MELIUS: Interagency
5	confusion make us jump from website to
6	website. Okay. I had missed it. When I went
7	to look it up on here on the DOE, I couldn't
8	find it. Okay. Thank you.
9	Any other questions from Board
10	Members?
11	(No response.)
12	CHAIRMAN MELIUS: Okay, thank you
13	very much, Greg.
14	This is a very short and sweet
15	presentation. This is more of a reminder than
16	anything. I went over our transcript from our
17	last meeting and Stu's presentation from the
18	last meeting on the 10-year review priority
19	items that NIOSH is under way to implement.
20	I think what we said at least I
21	said at the last meeting was, given between
22	the holidays and the relatively short time

between our last Board meeting and this Board meeting and sort of Work Group meetings were set, I didn't think we would have much time in that time period to start to address these, but I do think we have a number of issues from the 10-year review that we ought to be -- the Work Groups ought to be following up on.

I think there is timeliness and some other issues for the Worker Outreach Work Group, and I think what I would suggest we do -- and this goes for the other Work Groups involved also -- is that they should at their next scheduled meeting at least put aside some time for some discussion with NIOSH, and to at least figure out the schedule for NIOSH's efforts in the area, and sort of how do they coordinate for review or input from the particular Work Group.

So we have some timeliness and outreach efforts for our Worker Outreach Work Group. We have some dose reconstruction issues for the Dose Reconstruction

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Subcommittee that we already talked a little bit about. Some of them are the QA/QC issues, but there are some other issues there. So, Mark, when you meet at the end of March for that Work Group, it would be good.

Then the third issue that I had down, the third Work Group, was the SEC Evaluation Work Group, which has to do with the relatively minor problem of what is sufficient accuracy, and how do we deal with that.

Then one that I think cuts across a number of -- eventually across a number of Work Groups, which is issues related to coworker models and so forth, which we sort of left open a little bit, and I think we may have to sort of augment the SEC Evaluation Group, work between the Procedures Work Group and the SEC Evaluation Work Group -- excuse me, the Procedures Subcommittee and the SEC Evaluation Work Group to address that.

Some of that, I think, will depend

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on exactly what NIOSH is doing, since they are actually -- as I recall from the last meeting, the initial effort looking at sort of coworker issues and so forth, it was going to be focused on the Savannah River Site. Is that still the plan?

MR. HINNEFELD: Yes, that is still the plan.

Okay. CHAIRMAN MELIUS: So we may figure out who is involved with Savannah River. That is going to be example, bringing in people from there. again, I think, between now and our Board work call in April or our next meeting in June, the Work Groups involved could meet and at least get a schedule and a sense from Stu and NIOSH what their follow-up plans are, what the schedule will be for producing some of the products and reports that they've I think then we can be able to have a better idea of how to work with NIOSH on those 10-year implementation items.

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Then I think we will plan for each of our meetings coming up at least for the full Board to get a report on these efforts, and I think a number, if not all, of these issues should come back to the full Board for discussion, since these are items that will really impact the overall program.

Again, the Work Groups and the Subcommittees deal with the issues initially, and then bring them back to the full Board. So is that making sense to everybody? Yes, Paul.

MEMBER ZIEMER: That certainly makes sense. It did occur to me that, if we have a responsibility as a Board to follow up on NIOSH's implementation of the 10-year plan, and I guess that, in a sense, is what we are talking about, that there is a sense in which, if we have a lot of different Work Groups picking up little pieces of this, it gets a little fragmented, and things could fall through the cracks as well.

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It just occurred to me that it might be worth thinking about having a Work Group that would focus on the follow-up. That is, not that I am advocating more Work Groups; we have plenty. But it is something to think about. It is sort of the question: should there be a group whose job it is to sort of coordinate our follow-up in some way? That is sort of the question that pops into my mind.

CHAIRMAN MELIUS: I would like to Ι think is respond. that а legitimate question I think we talked a little bit about at the last meeting. NIOSH, I think, was of the sense that they felt, at least at the initial stages of their efforts, it was better to work with the Work Groups. That seemed to be where there is ongoing activity related to these issues, and we really do want integrate it with what the ongoing activity of both the Subcommittees and the Work Groups, but I think -- let's see how this goes and what the schedule is and how it will work out,

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1	and then see whether a separate Work Group
2	and I think, whether I am still wrestling a
3	little bit with whether an overriding issue
4	like sufficient accuracy is something how
5	to best deal with that in terms of Work Group
6	or Board or a separate Work Group to deal with
7	that issue, because that really does cut
8	across a lot of issues.
9	So we will keep that in mind and,
10	as we come to the next meetings, decide how we
11	want to handle that.
12	Anybody else have comments or
13	questions?
14	(No response.)
15	CHAIRMAN MELIUS: We have some
16	time left, and I will use it mostly to I
17	don't think we need to start Work Group or
18	Subcommittee reports yet, but a couple of
19	things to remind people of for work sessions.
20	We have comments from the August
21	meeting that we need to do that Ted emailed
22	out to everybody, if you can all take a look

at that, and we will get to that either this afternoon or tomorrow sometime. When I looked them over, they all looked relatively straightforward. So I don't think it is a lot of effort, unless you have a question or concern about one of the comments or how we handle that.

We do have also -- Mark, maybe when you do your talk later about Rocky Flats, but the DOL implementation issue that we put on for last time, we will talk about and do that.

Т think those the main are activities. We location for have some meetings and dates for meetings that we will need to start addressing, and we will at least start that this afternoon when we have a Board work session, because there are Board Members that aren't here, and we have potentially new Board Members coming on, but I think we need to sort of give people time to maybe doublecheck calendars or email some people and see

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1	if we can get some try to pin down timing
2	for some of those meetings, and then we have
3	location issues.
4	Anybody have anything that is not
5	on the agenda that they would like to make
6	sure gets on the agenda for this meeting?
7	(No response.)
8	CHAIRMAN MELIUS: Okay. Now why
9	don't we break a little bit early and rejoin
10	at 1:30 back here. Thank you.
11	(Whereupon, the above-entitled
12	matter went off the record at 11:41 a.m. and
13	resumed at 1:34 p.m.)
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## A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

(1:34 p.m.)

CHAIRMAN MELIUS: If everyone gets seated, we will get started. I think we have a full complement with all Board Members. Do you want to check on the phone?

MR. KATZ: Just let me check and see, Dr. Lemen, are you with us on the line, by any chance? The line is up, Mark? Okay, thank you. Let me remind everyone who is on the line, please to mute your phone. If you don't have a mute button, press \* and then 6. That will mute your phone. Thank you.

For CHAIRMAN MELIUS: Board Members, just to remind you, we have petitions will be discussing this we afternoon, Electro Metallurgical now, and then we will have a Board Work Session, and then we will need to start promptly at 3:30 with Hangar 481, because we also expect to have petitioners on the line for that one also. we will handle our afternoon that way.

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1 We will start with a presentation 2 Electro Metallurgical from Sam Glover. 3 Welcome, Sam. Thank you, 4 DR. GLOVER: Dr. If parts of this look familiar, it 5 Melius. 6 has been three years. Some of these slides 7 were previously presented in 2009, Rev. 0. I wanted to say that we carefully 8 looked at it. SC&A did a report. We reviewed 9 10 the data. We reviewed new data, and we looked at it and decided that NIOSH has concluded 11 12 that you can't back-extrapolate the data that we have. So that is kind of the bottom line 13 we walk through this. We changed our 14 15 conclusion for the early years. brief history: 16 So Electro Metallurgical, Electro Met, was located in 17 Niagara Falls, New York. It began operation 18 19 in 1942 under contract with MED. From August 20 1942, through June '53, the plant intermittently produced uranium metal. 21

And by intermittently, it had long

periods of production. Then it was shut down, and then it would start up again. So they did have shutdown periods. It is a DOE facility.

Electro Met was subsequently acquired by Union Carbide, which was, in turn, acquired by Dow Chemical. From 1942 to '51 operations were carried out with two standby periods. On June 30, '53, all AEC operations formally ceased, and the site was then purchased by Electro Met. Also, uranium was the only radioactive material present.

A brief summary of the petition: On November 7, 2008, it was received. In 2008, an additional petition December On March 12, 2009, received in received. November -- Let's see. March 12, it qualified for evaluation and was merged with the petition previously received in December '08. By July 23, 2009, an Evaluation Report was issued, and SC&A issued a report subsequently. In October 2009, the Evaluation Report was presented to the Advisory Board.

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The Advisory Board has met several times regarding various issues associated with Electro Met. In November 2011, NIOSH, after careful consideration of various factors, notified the Working Group of its intent to propose that a portion of the covered period of Electro Met be added to the Class -- or as a Class.

On January 31, 2012, Revision 1 of the NIOSH Evaluation Report was issued, and February 21 SC&A issued a partial review of the Revised Report, which they will discuss subsequently.

SEC Class: The Our proposed Petitioners proposed a Class Definition of all workers who worked at any area at Electro Met from August 13, '42, through December 31, August 13th, the date is sort of set. That is the earliest time that they recognize Engineering District the Manhattan beginning. The Class evaluated by NIOSH was the same: August 13, 1942, through June 30,

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1953.

We went through all the standard sources: DOE Legacy Management, our Technical Information Bulletins, Electro Met health plans, all of the various -- we went to all the different Oak Ridge facilities, Hanford. We tried to -- everywhere we possibly could find records, we went.

As of February 16th, we had 104 cases submitted to NIOSH. One hundred and two of those had dose reconstructions complete.

One of those cases had internal dosimetry, one case with external. Claims completed with a PoC greater than 50 percent was 48.

Petition basis concerns were: few workers monitored for external exposure, and the effectiveness of the Worker Health Protection and Industrial Health Programs.

These were the original petition concerns.

So a summary of monitoring:

Volunteer workers were intermittently

monitored to establish worker exposure levels.

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We have some data regarding issued dosimeters to employees in 1944, a handful, and from '48 to '49. We don't believe we have all the results. We have what is available.

Some urinalysis data are available for 1944-1949. SC&A -- we will both describe some different pieces of that. What I will point out is that major health improvements were done in 1947, and the predominance of the air data that you are going to look at was collected after that time frame. So we were asking you to believe that you could back-extrapolate and use that data in the previous time frame.

Only a handful of the air sample data are either BZ or GA types -- actually, very few in the earliest time frame. We have very few samples, period. I really want to point out that the air data collected in this early period is completely at odds with the later data. They are much, much lower. It is thousands of times higher when you look at

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those later time frames after the supposed improvements happened. So it doesn't make sense, and we have very few data.

There were some bioassay data collected, but again very short campaigns. So data monitoring programs after 1948 are much better documented. We are all very familiar with the Health and Safety Laboratory that began implementing at that time. We have much a better understanding of how their data was collected, what methods they used. None of that exists for the earlier time frame.

We have a very brief description that they used Rochester, but very little other information to go on to say why we believe these early data would be good.

Early urine data available to NIOSH collected from essentially a single campaign. It was about a couple of months time frame. So we do have some multiple data points for some people.

So, while a portion of the

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population were monitored, it is not possible to determine if the highest exposed workers were monitored, nor is there a group which would constitute an appropriate surrogate data or coworker group.

So just to give you a feel, this is a graphical. You see the first campaign, we have just a handful of data points. Then you go to the second period with Health and Safety Laboratories doing measurements, and the data is tremendously higher. It doesn't make sense after you make health improvements, if you are monitoring the same places and having similar types. We do not have what methods they used. We do not know.

So if you look at that data and want to say that the health improvements and the back-extrapolate, that was what we were asking you to believe before, and we have looked at that more carefully, and we have come to a different conclusion.

Just to give you a feel for it,

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you can see here you have in the early years, most of the early samples are general area types. You do have a couple of BZs. You have more of a mixture when you get into the '48-49 time frame, typical for a Health and Safety Laboratory analysis.

Bioassay data: It looks like a single point. There is some dispersion there. You are looking at a couple of months time frame back in that mid-1944 time frame. Then you have another campaign in '48, and then another one at the very end of the period.

The little box shows inside that box is an active period when Electro Met was operating, so just trying to give you a feel for when things closed down. So inside the box you have got an operational period.

Something else I want to point out is: at this point in time I certainly don't have the ability -- I have not found all the records where I could say this much uranium was rolled at this time versus the early

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years. I do believe that there are differences.

So if we were to try to do this, I think we would have to be very careful understanding what the total amount was in both periods. So I think it would be very complicated.

For external dosimetry, there certainly are -- this showed -- it is very complicated going through their dataset, and SC&A has pointed out we have some differences. Some of the data is rolled up into average summaries. So you have to extract from that individual results from air monitoring data and for this other.

We have thousands of measurements that were conducted in the late time frame, and we believe that, based on our experience with this type of operation, that we can do external dosimetry at Electro Met.

Medical dose: Typical for a DOE or AEC/AWE facility at this time. This is a

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DOE facility. We have several references that we believe we can use to do the medical facility. We actually have descriptions of the pre-employment annual and termination X-rays that they did, and so we believe we can do the medical dose.

So a summary of findings: NIOSH has determined that neither the bioassay nor the early limited air sampling data are sufficient to bound the dose for Electro Met for the period August 13, 1942 through December 31, 1947.

We are all familiar with the twoprong test. So, in summary, we find that it is not feasible to estimate internal exposure with sufficient accuracy for all workers at the site from August 13, 1942 to December 31, Internal monitoring data, work area 1947. radiological monitoring data, and source-term sufficient data are not to provide sufficiently accurate estimate of the bounding internal dose during this early period at

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Electro Met.

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proposed Class is: all Our employees of the Department of Energy, predecessor agencies and their contractors and subcontractors who worked at the Electro Metallurgical site in Niagara Falls, New York, the period August 13, 1942 December 31, 1947, for a number of work days aggregating at least 250 work days occurring either solely under this employment or with combination work days within the parameters established for one or more other Classes of employees in the Special Exposure Cohort.

I revised this slide to show that it is feasible after '47, so uranium. We believe that for external we can do all years, for gamma, beta, and occupational medical X-rays, but of course, not feasible in the early time frame.

Thank you very much.

CHAIRMAN MELIUS: Questions for

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 Sam? I think we are going to hear from Henry next. What is the order going to be?

MEMBER ANDERSON: Well, I don't know.

CHAIRMAN MELIUS: Well, it

reading from. You want John? John is fine. I just didn't know. Why don't we hold questions

is not on your annotated agenda that I

8 then?

MEMBER ANDERSON: Okay. What I am going to quickly go through is what our Work Group did, and there has really been two main issues that we focused on. We began with the NIOSH Evaluation Report for the SEC-00136, and then there were also during that review some incidental Site Profile issues. Again, this is the former 6001, as you saw earlier became — Appendix C was under 6001, and then became a separate issue and document for us to review, but the SEC petition has stayed pretty much the same.

Just to give you some sense of what went on, the dark -- you can see where it

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is bolded. Our committee had three meetings where we discussed this. We were assigned this back in October of 2009 when the first SEC ER was presented to the Board. It then got assigned to us to review.

SC&A did their first initial report, reviewing the ER in April of 2010. July, where then met in we began discussion, went through the matrix. were 18 items on the SEC review by SC&A, and we very quickly were able to go through and resolve many of those.

Then in May of 2011, May 16th, just before the Work Group meeting, we got an update report from NIOSH, and then in August of 2011 we had another meeting where, again, most of the issues were resolved, and NIOSH shortly thereafter indicated that they were going to revise the ER recommendations, and further discussions were largely put on hold.

We had, in our initial discussions, many of the issues that you saw,

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really two different time periods, different monitoring results. We raised the issue about the adequacy of the earlier samples. We also saw that there had not been interview results, and we recommended that worker interviews be done, and those got added in.

The revised ER then came out February 7th. Our Work Group meeting was scheduled for the 21st. there So wasn't much time for SC&A to comment on the revised ER, which, as you heard, reversed the initial impression by NIOSH or recommendation that they could do dose reconstructions, and they looked more closely at the data and our discussions.

That earlier portion then was changed to make a recommendation that it become an SEC, and as I say, in February the 21st we had some further discussion on that, and it was at that meeting where SC&A came forward and said on their initial kind of short, quick review they disagreed with NIOSH,

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that they thought maybe dose reconstructions could be done and, of course, this meeting was then coming up quite quickly.

there wasn't time to try to all resolve these issues prior to meeting. So after the initial discussion there, our Work Group -- Bill and I were on the phone at the time, and subsequently Mark got somewhat up to speed on the issue as well, and we decided to provisionally vote group that would accept we the NIOSH recommendation that there be an SEC, add an SEC for the early year through 1947, but that we would agree with NIOSH to deny the later year where there was considerably more data, and we felt, while it may not have been the it could lead strongest data, that to bounding and reasonable estimates of exposures.

So we haven't had a chance as a Work Group to meet and go over further. So what we have said is we wanted to move this

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along, so we would bring the two parties here to discuss before the Board, but after the initial discussion and presentation at our meeting, I think we as a Work Group felt that NIOSH was correct in their assessment on the quality of the data and the ability to reconstruct these early year issues, that one could say it is possible or you might be able to, but we really felt it was a challenge to tell NIOSH that they could do something that they didn't think they could.

This is just further the Appendix review, Appendix C. Again, there are just a few issues in the TBD that need to be changed. They are mostly technical ones, not impacting the SEC evaluation at all.

The current status is -- and you will hear about the review that SC&A has done, and they really have -- there are two open issues out of the 18 we started with, and then dose reconstruction, not SEC, are six issues.

Two really are not relevant to Electro Met,

and they have been addressed in the revised ER.

So pretty much our issues have been resolved. The current status is really two issues: can you do sufficiently accurate assessments to do dose reconstruction in the early years? Then there was also -- and we have had this on numerous sites. It is a very large plant and area, a relatively small number of workers, and SC&A -- and we tended to agree with that -- felt that you probably could define who those workers were, but again NIOSH went to DOE and DOL to say: couldn't they define the Electro Met to be a specific building or an area, and they basically came back and said no. So it is a total worker issue again, and the early years is one of those issues that we have had come up numerous sites.

At this point, it is really nothing that we can do about it or NIOSH. We have raised the issues and have had them

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rejected.

So with that, I will pass it on, and then what we would like to do is, if you have had a chance to look over the materials or you have specific questions, but at this point our feeling as a committee was that the modifications NIOSH made are appropriate, and we are supportive of granting the SEC in the early years and then doing dose reconstruction in the later years when we have a much more compact dataset that can be worked with.

So, questions? We have kind of moved back and forth. Again, just as a plea as we move forward on a lot of these, we got the information late before the meeting, and then SC&A got it late. So we all got backed up, and then this meeting was coming up. So it was a very rapid turnaround to try to bring this to our attention, but we felt there wasn't much more that our Work Group could do at this point in time. So we wanted to bring it here. If you want to send it back to us to

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do something further, we really weren't very directed. Recommendations for what you would like us to do?

CHAIRMAN MELIUS: No, I think this is fine, what you have done in terms of process and probably outcome. We will hold questions until -- let's do them all. Put the three of them up there, and take our shot.

Good afternoon, Dr. STIVER: Melius and Members of the Board. I am John Stiver with SC&A, and I am going to describe Evaluation SC&A's position the latest on Report that had а relatively we turnaround time to review, and some other changes that we feel may be necessary since this presentation was put together.

Last Friday, we had a technical call moderated by Ted Katz with both SC&A principals as well as NIOSH where we tried to clarify some of the issues that we didn't fully understand. Based on that discussion, which was part of Dr. Glover's presentation

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today, we have altered our stance, at least on the first issue here.

I am not going to go through too much detail on this, as it has already been covered in both Sam and Henry's slideshows, but I guess the most important aspect here is that May 16, 2011, was when this information that NIOSH was able to gather allowed them to change their position on the ability to indeed reconstruct doses for that earlier time period from 1942 to December 31st of 1947.

This is just kind of a general overview of our position on this issue. We believe that all but two of our original findings based on our Evaluation Report reviews have been resolved. A number of them were moved to TBD discussions, because they really are pertinent to dose reconstruction and not SEC issues.

This last bullet may take a bit of explaining here. A process does not currently

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exist to ensure that SC&A's findings related to dose reconstruction are addressed in the Site Profile.

Basically, we were never formally tasked to review either Appendix C from TBD-6001 or the new standalone Site Profile. However, as part of our Evaluation Report reviews, we did kind of an informal review, but the findings related to the Site Profile are kind of in limbo at this point in terms of actually getting them implemented.

The two overarching issues that we felt were of concern here were, as Sam discussed, the ability to calculate bounding doses for the early operations from through 1947, and the second which we believe is still quite pertinent is the ability to identify employees who worked in the area plant where the MED activities were conducted as compared to all employees who worked in commercial operations, separate constitute several thousand employees.

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doses for early operations. In the original Evaluation Report, NIOSH indicated that they did believe that they could calculate -- or they could reconstruct the doses for that early period by back-extrapolating this large quantity of air sampling data; and in Finding 17 from our 2010 review, we did state that NIOSH needs to provide convincing arguments that the 95th percentile values based on the

Let's take a look at the bounding

indeed bounding

In that review, our 2010 review, we provided arguments both for and against the proposition that this 95th percentile could indeed be used, and we noted, among other things, that while the basic process steps may have been unchanged, as also you saw earlier, 1947, steps were taken to reduce the exposures based on recommendations by the AEC medical division.

In the Revised ER, NIOSH concluded

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they could not bound these internal doses, arguing that they had determined that neither the bioassay nor the early limited air sampling data are sufficient to bound internal doses for the period under question.

While we indicate that the opposite position is taken, we did not receive the information in May of 2011 prior to the St. Louis meeting. So we were not aware of the details of the research that NIOSH had done on the bioassay data from 1944, and that will become evident in subsequent our discussions here.

Based on our knowledge from our reviews, we had accepted that NIOSH could construct internal doses for later operations based on air sampling data, and also our 2010 review had demonstrated from a statistical standpoint, without knowledge of what these data really represented, that the bioassay data from 1944 and '49 were not statistically different.

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Ergo, you have bioassay data. If you believe that that data from 1944 is indeed representative of the exposure conditions that existed during the entire five-year period, and you believe that the later bioassay data are also representative, and you have a good set of data from the later period, then you should be able to back-extrapolate.

That was our proposed alternate logic that had come out from this short-term review of the latest Evaluation Report that was published on February 7th of this year.

The next two slides are just graphics that kind of illustrate the idea of bioassay data really how the not statistically distinguishable from one The means, 95th percentiles, another. very close, I believe. For the 1944 data, it was .05 micrograms per liter. In 1949, it was at .045; the 95th percentile for .19 and .175, and the GSD for the later period is a little I think it was about 5.7 or 5.4, bit broader.

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and it was about 4.3 for the earlier period.

This plot here shows kind of a box representation of the 95th percent confidence regions for the regression coefficients from 1944 and '49, and you see there is an overlap on both the slope and the intercept, and the broader range of the 1944 data has to do with more values being less than the actual limit.

We also felt that the fact that the earlier air sampling data, while sparse, was considerably lower in the later data, that that might also bolster the position that it may be possible to use that later data to back-extrapolate.

This is essentially the same slide that Sam had presented earlier. It just graphically represents the air sampling concentrations and units of micrograms of uranium per cubic meter of air for the period of '48 and '49, and also shows the kind of paucity of data in '43 and '44, but also the fact that there were very low-level samples.

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So I guess in summary, for that first issue, we believe that it may still be worthwhile looking into this or at least considering the possibility that these doses could be reconstructed. However, we felt that that 1944 data, bioassay data, was really the hook that would allow us to have some credible representation of the early dataset that would then allow back-extrapolation.

Based on the description of the activities that did take place that Jim Neton had provided, in the early forties there was a lot of hand shoveling of this material. We have basically one year of data over only about a two-month period. We have operations that are continuing over a five-year period, a very small set of data that would have to serve as a representative sample.

So we are really not really taking a rigid stance on this. We feel that a credible argument, weight of evidence argument, could be presented for or against

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the SEC. So we are kind of backing off a bit on our position based on that initial review.

As far as the identification of the Area Plant workers, we believe this is something that the Board really should look into. The Class is currently defined as all workers at Electro Met during that period of 1942 to 1947. However, we have a lot of information here that indicates that that Class could possibly be restricted.

Some of the information here is that the primary business of Electro Met was commercial. It was the manufacture of iron-based alloys for the commercial markets.

The Area Plant was built in '42 under a MED contract, basically to reduce green salt to metal and then to remelt it into ingots for use in the AEC complex. The plant was a single building located in one corner of the existing Electro Met site, and it was fenced, guarded, and had pretty effective access control.

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The staff at the plant was fairly well-characterized. It was small. There were 67 individuals. You can see the breakdown: supervisors, about [Identifying information redacted]; about [Identifying information redacted] operators; and then the other categories of quards, office workers, and so forth, and also the outside support. didn't have a lot of janitors, support staff coming in who may have been exposed but were not monitored.

Basically, you have got electricians that came in about two days a month, and pipe fitters for about two days a year. So we feel it is a pretty well defined Class of workers who had the exposure potential at the Area Plant.

Our first finding, in fact, from the April 2010 Evaluation Report was that NIOSH had discussed the issue of access controls explicitly in the Evaluation Report to justify the basis for including all workers

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at Electro Met, rather than just those who worked in the Area Plant.

Evidently, NIOSH had contacted Labor and replied that they believed they could not place the workers in specific buildings. However, it is not clear to what extent DOL evaluated all the data that were available in the SRDB and other sources.

We believe that this is an issue that may justify further investigations of the available data for defining the SEC Class. We have included some examples of the data that are available in the SRDB: 8912 was 47 workers, gives their names, job descriptions, start date in the plant, when they were transferred, laid off, when they were rehired or recalled. So it's a pretty comprehensive set of data for a lot of these workers.

There is also bioassay samples by worker name. There is a lot of film badge data available, some workers sampled more than once. Granted, this is external dosimetry,

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but there is a lot of data available there,
and there is also results for the '43
urinalysis results by named workers with job
descriptions.
So we believe that sufficient data
do exist to review the conclusion that the
Area Plant workers cannot be specifically
identified.
That is pretty much the end of our
presentation. I would like to entertain any
questions at this point.
MS. LIN: Dr. Melius.
CHAIRMAN MELIUS: Yes?
MS. LIN: This is Jenny with HHS.
I ask the Board Members not to circulate the
presentation from John Stiver. It does
contain some Privacy-Act-protected
information. Once I have a chance to redact
some of those information, then I will let you
guys know.
CHAIRMAN MELIUS: I don't think it
has been circulated.

1 MS. LIN: Great. Thank you. 2 CHAIRMAN MELIUS: Okay. Josie? 3 MEMBER BEACH: Ι just have I noticed, Sam, in your 4 couple of questions. 5 presentation it said that there were major 6 improvements from '47 -- starting in '47, and 7 then in the ER it said "health improvements." Was that related to the sampling that you had 8 mid-'48, the bio-sampling, 9 or was 10 something other than that? 11 DR. GLOVER: Ιt wasn't 12 necessarily sampling. There is not a lot of 13 description. They were not explicit. The Health and Safety Laboratory, when they came 14 15 in in 1948, when AEC took control of all these 16 sites, Electro Met was one of those seven facilities. 17 There is that real thick report 18 19 where they basically talked about Simonds Saw 20 and Steel and Electro Met and all that. So that is when the Health and Safety Laboratory 21 came in and said, what the heck is going on, 22

1	but we don't know what they did in '47
2	completely to fix it. We know that they
3	described it as major health improvements.
4	MEMBER BEACH: Well, I noticed
5	when I read the interview notes they talked
6	about it being very dusty. So I was curious
7	if it was based on that or the results.
8	Then the other question I have is:
9	can you give me a better description of the
10	external before '48 when you say you can do
11	all external, but I notice you don't have any
12	data until about mid-'48. So how are you
13	doing the earlier external?
14	DR. GLOVER: One of the things I
15	apologize for, when I made the changes to the
16	Evaluation Report, I tried to really focus on
17	making the change only with respect to our
18	deficiency.
19	When TBD-6001 fell apart or was
20	disbanded or however you want to say it
21	MEMBER BEACH: Renamed?
22	DR. GLOVER: Renamed. Appendix C

was just changed to TBD-6001 to make this new Evaluation -- not an Evaluation, this new Technical Basis Document. We did not update it with the changes, and we didn't try to put that into -- I would have far exceeded my time in trying to get this to the Board and trying to do this, because a lot of my changes are based on getting this done.

So getting into the details of how I am going to go all of the -- I guess I didn't possible want to state every deficiency. I believe that we can do it based on all of the data we have done for TBD-6000 type work, for the kind of metallurgical work ability those kind and the to use descriptions to come back with the external dose.

MEMBER BEACH: Thank you.

CHAIRMAN MELIUS: Sam, while you are up there, did I understand you correctly that we really don't have production information data over time for this facility,

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at least in the early years?

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DR. GLOVER: I have intermittent pieces, scraps and pieces. It is not complete.

CHAIRMAN MELIUS: Because I would think that that would be key to sort of understanding were the two periods alike. To me, looking at the different data that was presented and so forth, it certainly doesn't make sort of logical sense, if someone came in and cleaned up the operation, so to speak, that exposures would increase rather than decrease.

Really, without sort of some good source or production data, whatever you want to call it, I think it is really hard to draw conclusions that from what on has been presented, one way or the other. I tend to agree with your conclusions based on information you had, and not as much with what SC&A was claiming.

I think, if we had the production

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data, then maybe we could make more sense out of it, but without that, I think it is difficult. It sort of doesn't seem logical, what happened.

Wanda. Then Paul.

MEMBER MUNN: Do your scraps of information regarding production include a scrap or two from 1944 and a scrap or two from the '48 and '49 era?

DR. GLOVER: I must admit that, yes, it certainly has. I don't have -- I did not evaluate them analytically, because it was so broken. I didn't feel it was going to be worthwhile for me to be able to pull that data together. We have some limited information from both periods.

I believe the earliest period would have been our largest series of production as they were driving to get that uranium out, but that is just my take on it. They certainly then shut down for a year, year and a half, then came back up and running for

a while, but I don't -- we don't have good numbers.

MEMBER MUNN: Yes, it would seem logical, but by the same token, if you have bioassays from both periods and there is no significant difference between what we see in the bioassays, then -- okay. No question in that, just ruminations.

CHAIRMAN MELIUS: Again, just a quick comment. It is hard to get a coherent picture there without all the information. That is what -- you are sort of grasping at different pieces, and how does it fit together? You are right to bring that up, but I think --

MEMBER MUNN: Always, but the issue as SC&A has presented it, and which seems perfectly logical on the face of it is that: if there are not significant changes in the two groups of data that you have, then it should be boundable, especially in such a discretely identified group of workers as

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This is far more easy to define than most of the sites, especially the AWE sites that we have looked at. This one clearly is set aside, and the workers in that group are pretty well identified.

CHAIRMAN MELIUS: Well, I think that is open to question also. Jim?

This is Jim Neton. DR. NETON: Ι think we need to remember that this snapshot of a couple of campaigns of bioassay samples that we have had, and we are trying to reconstruct an acute -- I mean a chronic exposure scenario that occurred over a period of four or five years, and all you have are data in pretty much the middle of it that were taken on a couple of different instances, and how those data could be used to inform us as to what the chronic exposure condition was over the entire four-year period is not clear to me.

The other thing we need to

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1 remember is what Sam pointed out, that the 2 early air sample data -- I think there were 3 primarily GA samples --That is correct. 4 DR. GLOVER: -- and we don't really 5 DR. NETON: 6 know the pedigree of those samples at all. We 7 do know that the later samples were taken by the Health and Safety Laboratory, which we 8 know has a very good, excellent reputation for 9 10 doing quality measurements. So there are a lot of disconnects 11 here that just don't add up or we are not 12 13 comfortable in saying that we can put an upper bound that early period, particularly 14 on 15 since, if it were a higher production era, the 16 numbers just -- the data that we have don't make sense in light of what we know about what 17 18 was going on there. 19 CHAIRMAN MELIUS: Paul? 20 MEMBER ZIEMER: Sam, Ι noticed that most of the claims submitted already have 21 22 been processed. Do you have any notion as to

how those were distributed in time? There were 104 claims. One hundred and two have been completed, only two of which contained actual external or internal dosimetry data.

So were these coworker model types of calculations, and do we know how these are distributed over those early years versus the later? It may not be a fair question at this point. I am trying to get a feel for whether what you have already done is mostly with later stuff that you could do easily or what did you do on the early ones if this is part of that?

DR. GLOVER: The TBD or the Appendix C that was used basically took that 95th percentile approach, but it was distributed by if they thought it was supervisor or a different kind of person, there be some variance. The 95th may percentile was used and 60,000 dpm per day intakes, but that is not applied to everybody, but a lot of workers, that is how we would

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1	have done it, depending on the job title.
2	MEMBER ZIEMER: But you would have
3	done it the same way over all the time period
4	then. Is that what you are saying?
5	DR. GLOVER: We were using a
6	uniform model, yes, sir.
7	MEMBER ZIEMER: Got you. That was
8	just one question for clarity, in my mind.
9	I also wonder if maybe John Stiver
10	could comment based on what you just heard Jim
11	Neton say. I got the feeling that SC&A maybe
12	was hedging a little bit on your written
13	conclusion that you believe dose can be
14	reconstructed.
15	MR. STIVER: Yes. We did not have
16	the detailed information regarding
17	MEMBER ZIEMER: Those things that
18	Jim talked about just now?
19	MR. STIVER: the things that
20	Jim had talked about and what Sam had brought
21	up about this being taken in a very short
22	campaign. If you can accept the proposition

1	that that dataset is indeed representative of
2	the entire period of operations, then you can
3	make that logical extension and extrapolate
4	that data.
5	I guess the question becomes just
6	one of weight of evidence and making a
7	judgment as to whether you have enough faith
8	in that dataset and its pedigree to make that
9	extrapolation.
10	MEMBER ZIEMER: But you didn't
11	have that information at the time you that you
12	reached that conclusion?
13	MR. STIVER: We did not really
14	have that information. We had six months. We
15	had made some preliminary observations. We
16	didn't have that information that NIOSH had
17	used, basically, about May of last year to
18	make that change in their interpretation. So
19	we were kind of scrambling to pull all that
20	together.
21	MEMBER ZIEMER: Okay. I am just
22	trying to get a feel for the extent to which

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1	you two are you two being NIOSH and SC&A
2	are far apart or together. It looks like you
3	are closer than I thought you were.
4	MR. STIVER: I would say at this
5	point we are probably closer together. This
6	thing has been moving forward very rapidly.
7	MEMBER ZIEMER: Then my final
8	follow-up is: If we were to identify this as
9	a well, whether we do an SEC Class or not,
10	I think the question about restricting it to
11	the full to the MED site versus the full
12	facility, I am a little uncomfortable with
13	where we are on that. The statement that DOL
14	can't administer it do we know that? Is
15	that really the case?
16	MR. STIVER: Maybe NIOSH can
17	MEMBER ZIEMER: Sam, can you speak
18	to that a little more? It looked like there
19	is good restrictions there.
20	DR. GLOVER: This is a DOE site
21	you know, this compound was built by the
22	Department of Energy with DOE money. So now

this thing is built in the middle of the site.

If they don't put the people in the site -what's that, sir?

MEMBER ZIEMER: The fenced area

that you are talking about?

DR. GLOVER: Yes, sir. There's a DOE portion. So the Department of Labor nor the company, they won't put the people -- if they don't give them for to us reconstruction, then we wouldn't try to -- we wouldn't be forced to -- we do not have records for everyone. We don't know who those people are, and we had a lot of them, but the company won't help. The Department can't -they don't believe they can be any specific.

able to administer it more closely, it by definition is already a Electro Met DOE facility, and they could -- but they company said they can't do it, and the Department of Labor in their answer to us, they said, you

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1 can't do any better than that 2 information. 3 They are going to give us those people for dose reconstruction. 4 5 MEMBER ZIEMER: I think SC&A So 6 was just raising the question at this point. 7 You didn't have evidence, did you, John? No, we didn't have 8 MR. STIVER: evidence. We just felt that it was impossible 9 to constrain that Class. 10 think CHAIRMAN MELIUS: Ι the 11 issue with all of these situations 12 is whether or not there are lists that indicate 13 who worked there or who was monitored. 14 15 are those inclusive? And we run into this. 16 think do we have adequate records, personnel or otherwise, to say that, you know, and then 17 18 know enough about the sampling program and so 19 forth to know whether -- monitoring program -to know whether everybody is included, that we 20 could match these people up. 21

I guess I am just skeptical, both

1	on what I have heard and what has been
2	presented, but also given the time period
3	involved with the site, I think we continue to
4	be surprised by how, even at some of the
5	bigger, larger sites and ongoing sites, how
6	often this is not the case when we try to
7	isolate a part of a site.
8	Anybody else have any questions or
9	comments? Yes?
10	MEMBER ANDERSON: I guess you have
11	got our recommendation already.
12	CHAIRMAN MELIUS: We have a
12 13	CHAIRMAN MELIUS: We have a motion?
13	motion?
13 14	motion?  MEMBER ANDERSON: Yes.
13 14 15	motion?  MEMBER ANDERSON: Yes.  CHAIRMAN MELIUS: We have a motion
13 14 15 16	motion?  MEMBER ANDERSON: Yes.  CHAIRMAN MELIUS: We have a motion  from the Work Group essentially to approve the
13 14 15 16 17	motion?  MEMBER ANDERSON: Yes.  CHAIRMAN MELIUS: We have a motion  from the Work Group essentially to approve the  NIOSH report and so forth.
13 14 15 16 17	motion?  MEMBER ANDERSON: Yes.  CHAIRMAN MELIUS: We have a motion  from the Work Group essentially to approve the  NIOSH report and so forth.  MEMBER SCHOFIELD: I second that.
13 14 15 16 17 18 19	motion?  MEMBER ANDERSON: Yes.  CHAIRMAN MELIUS: We have a motion  from the Work Group essentially to approve the  NIOSH report and so forth.  MEMBER SCHOFIELD: I second that.  CHAIRMAN MELIUS: We have a second

2	CHAIRMAN MELIUS: To accept the
3	motion from the Work Group.
4	MEMBER GRIFFON: Which is a motion
5	to add a Class.
6	CHAIRMAN MELIUS: Yes. Do we have
7	the letter, copies of the letter. We can do
8	this through the
9	MEMBER ANDERSON: Yes. From
10	August 13, '42 to December 31, 1947. It is
11	that time frame.
12	CHAIRMAN MELIUS: I just want to
13	make sure that Members of the Board have the
14	letter. I think Nancy is going to check. We
15	are trying to get copies.
16	MEMBER MUNN: This is all employees
17	of the whole site.
18	CHAIRMAN MELIUS: Yes. Why don't
19	we do the vote?
20	MS. LIN: Dr. Melius?
21	CHAIRMAN MELIUS: Yes.
22	MS. LIN: My understanding is that

accept the Class as proposed by NIOSH.

1	the Work Group recommended to accept the
2	earlier year which is '42 to '47 as the SEC
3	time period, and then the later time period
4	could be that dose reconstruction would be
5	feasible.
6	CHAIRMAN MELIUS: That is not in
7	the letter. Because that wasn't clear so
8	we will just do the SEC.
9	MR. KATZ: Do you want me to
10	proceed?
11	CHAIRMAN MELIUS: Go ahead and
12	proceed, yes. I want to get the letter.
13	MR. KATZ: Dr. Anderson?
14	MEMBER ANDERSON: Yes.
15	MR. KATZ: Ms. Beach?
16	MEMBER BEACH: Yes.
	riariblic blitch.
17	MR. KATZ: Mr. Clawson?
17 18	
	MR. KATZ: Mr. Clawson?
18	MR. KATZ: Mr. Clawson?  MEMBER CLAWSON: Yes.
18 19	MR. KATZ: Mr. Clawson?  MEMBER CLAWSON: Yes.  MR. KATZ: Dr. Field?

1	MR. KATZ: Mr. Griffon?
2	MEMBER GRIFFON: Yes.
3	MR. KATZ: Dr. Lemen is absent. I
4	will collect his vote after this meeting.
5	Dr. Lockey?
6	MEMBER LOCKEY: Yes.
7	MR. KATZ: Dr. Melius?
8	CHAIRMAN MELIUS: Yes.
9	MR. KATZ: Ms. Munn?
10	MEMBER MUNN: I am abstaining.
11	MR. KATZ: Abstaining. Dr. Poston
12	is absent. I will collect his vote.
13	Dr. Richardson?
14	MEMBER RICHARDSON: Yes.
15	MR. KATZ: Dr. Roessler?
16	MEMBER ROESSLER: Yes.
17	MR. KATZ: Mr. Schofield?
18	MEMBER SCHOFIELD: Yes.
19	MR. KATZ: And Dr. Ziemer?
20	MEMBER ZIEMER: Yes.
21	MR. KATZ: So the motion passes
22	with one abstention and two absentees to be
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1	collected.
2	MR. CIVILETTO: Gentlemen?
3	CHAIRMAN MELIUS: Yes? Oh, the
4	petitioner. Go ahead.
5	MR. CIVILETTO: Hello?
6	MR. KATZ: Yes, go ahead. We can
7	hear you.
8	MR. CIVILETTO: Yes. I was just
9	wondering, I would very much like to address
10	the Board. Is there sufficient time to do
11	that?
12	CHAIRMAN MELIUS: Yes, there is.
13	We apologize. We were informed that you were
14	going to listen in, but not that you were
15	going to address. But you are welcome to
16	address the Board.
17	MR. CIVILETTO: And I will try to
18	be quick, and I certainly appreciate the
19	opportunity.
20	I really strongly urge the Board
21	Members to accept the SEC Class that has been
22	recommended by NIOSH, and to estimate

radiation dose with sufficient accuracy, the federal law does require NIOSH to establish it had access to sufficient information. Sufficient, obviously, is the key word.

I think Dr. Glover stated that, without hesitation, NIOSH is recommending this Class, because they really are unable to estimate dose reconstruction. I am not going to rehash. There obviously is limited data, air sample data, urinalysis data.

One of the points that I had contended in my petition was that -- and it has now been confirmed -- that there were records found that had Electro Met radiation dust exposure in those early years that NIOSH is addressing was 500 times greater than the tolerance levels of the day.

With respect to the issue of -and I think it was important that both Electro
Met and the DOL cannot with any degree of
certainty place employees in certain buildings
or even in the Area Plant. Before I filed the

petition on behalf of my father who worked at Carbide, I requested records of where he had worked. I was very young when he worked during the war years, but I was told that there were no records available.

My father worked at Electro Met from 1938 until his untimely death from colon cancer in 1965. He was 55 years of age. My family and I had no knowledge in 1965 or even in the later years that Electro Met was involved in the Manhattan Project.

The claim my sister and I, which was filed, I believe, in 2006, for survivor benefits denied based was upon dose reconstruction. I work. I am an attorney. work with many other families that involved, really, what of and is utmost concern to many family survivors is employees in so many of the plants, including Electro Met, were unwittingly working in this Manhattan Project at tremendous risk to their So many, many that I personally know lives.

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The U.S. government placed all of these employees in positions of high risk to their health and lives at a time when, really, little was known about the danger of exposure to radiation. There clearly was little monitoring.

I believe, and sincerely believe, that the question to be answered is: should employees of Electro Met or their faced with insurmountable survivors be an burden of proving exposure? I was just unable to do that on behalf of my father. I honestly think that that can't be done with that burden.

Your decision is, obviously, critical. The success or the failure of claims for a fair and just compensation hangs in the balance, and I respectfully ask that the Advisory Board Members accept NIOSH's recommendations, and I thank you for this opportunity.

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1	CHAIRMAN MELIUS: Thank you.
2	Again, I apologize. We didn't understand that
3	you wanted to speak, but we appreciate your
4	comments and taking the time.
5	MR. CIVILETTO: Thank you.
6	CHAIRMAN MELIUS: We are going to
7	hold off on the letter. We are having some
8	drafting issues at the moment.
9	We have a Board work session now.
10	The SEC is approved, and we will come back
11	and do the letter a little bit later on that.
12	Ted, do you want to talk about
13	future meetings? I want to get that
14	information out.
15	MR. KATZ: Sure. We have to
16	schedule out, because our next face-to-face
17	meeting is June schedule out the next. We
18	are scheduled for September 18-20 Board
19	meeting. So I am scheduling beyond that, the
20	next two meetings, the next teleconference and
21	the next Board meeting.

MEMBER ROESSLER:

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Could you review

1 the ones that are already scheduled? Sure, sure. We have an 2 MR. KATZ: 3 April 26th teleconference, and then a June 19-21 Board meeting in Santa Fe; August 4 5 teleconference; and then September 18-20 Board 6 meeting, place to be determined, and we will 7 talk about that in a moment. 8 MEMBER ROESSLER: Thank you. MR. KATZ: Then we are scheduling 9 10 out beyond that, the next two. The next teleconference: The right time frame is the 11 12 week of November 5th-9th or, backing up, it is 13 not quite as good timing but October 29th through 11/2. just depends on whether 14 Ιt 15 either of those weeks is completely 16 problematic. So 11/5-9 is the better week in 17 terms of timing, but if that doesn't work, we 18 will back up. 19 20 And this is -- we are only talking about a teleconference, right? So it is a 21 sort of 11 to 1 proposition, 11:00 a.m. to 22

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1	1:00 p.m.
2	MEMBER RICHARDSON: The 7th and
3	8th are out for me. I've got a meeting.
4	MEMBER LOCKEY: The 6th is out for
5	me.
6	MR. KATZ: So, 6, 7 and 8, I hear,
7	are out. This is November. So the fifth or
8	the ninth, are either of those a problem?
9	MEMBER ANDERSON: The fifth is
10	good.
11	MR. KATZ: Does November 5th work
12	for everyone? Okay. So for now, we will have
13	11/5 teleconference.
14	All right. Face-to-face then,
15	December 10-14 or 17-21. Either of those a
16	problem?
17	MEMBER ANDERSON: What date?
18	MR. KATZ: Well, whole weeks, it
19	could be any point in the week, but the week
20	of December 10-14 is one possibility.
21	MEMBER MUNN: Eleven, 12, 13?
22	MR. KATZ: Right. That is the

1	middle of the week, or the following week in
2	December.
3	MEMBER RICHARDSON: The start of
4	the week would be better, if possible.
5	MR. KATZ: You mean 10th through
6	13th, David?
7	MEMBER RICHARDSON: Yes.
8	MEMBER LOCKEY: Tenth through the
9	12th, right?
10	MR. KATZ: Tenth through 12th,
11	right. Does that work for everyone? Okay.
12	So December 10th through 12th. All right.
13	CHAIRMAN MELIUS: Is there a
14	problem with the 13th? I am not suggesting,
15	but I do think
16	MEMBER BEACH: Traveling on Sunday.
17	CHAIRMAN MELIUS: Yes, depending on
18	where we locate it.
19	MR. KATZ: Someone suggested the
20	beginning of the week, but does that work,
21	David, December 11th, 12th, 13th?
22	MEMBER RICHARDSON: It takes me

1	out of two days of teaching.
2	CHAIRMAN MELIUS: Let's keep it at
3	10th through 12th, if we can. I just also
4	think it would be good to consult our two
5	absent and our two new full Board Members.
6	MR. KATZ: We don't know at this
7	point whether it is a two-day or a three-day
8	meeting as well.
9	CHAIRMAN MELIUS: Right, which is
10	the other issue also, and so forth.
11	MR. KATZ: So for now we will keep
12	it penciled in the 10th through 12th, but we
13	will follow back with you all on that.
14	MEMBER ANDERSON: If you do it on
15	the 10th, everybody has got to bring presents.
16	It is my birthday.
17	CHAIRMAN MELIUS: Smoked fish. We
18	already heard.
19	MR. KATZ: Depending on where it
20	is, too, we could do it the afternoon of the
21	first day, if it is on that Monday.
22	CHAIRMAN MELTUS: Locations?

1	MR. KATZ: Location. So now we
2	are talking about locations for the September
3	meeting. That is September 18th through 20th.
4	Just a few thoughts to throw out for your
5	consideration: One, a lot of claims always
6	from Tennessee. We haven't been there. We
7	have intended to go there before, and it has
8	fallen through. I am thinking of locations
9	especially that are good while it is still
10	relatively warm, so they are easier to get to.
11	Tennessee is one. Idaho is
12	another possibility, and part of this depends
13	on what work is lining up for the time period.
14	Josie?
15	MEMBER BEACH: Were we not set to
16	go to D.C. also?
17	MR. KATZ: We were, but there is
18	no site in D.C. So we are not serving any of
19	the workers, at least, if we want them
20	present, but that is another location that we
21	have been solicited to visit. Idaho
22	MEMBER CLAWSON: December sounds

great to me.

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MR. KATZ: For where, Brad? Well, Idaho -- September is still okay in Idaho, right? You're not snowed in? So the two other places on the East Coast -- well, there are three other possibilities. One, there is a AWE in Massachusetts that will have an SEC Evaluation ready in June. So plenty ripe for SC&A to look at that as well before the meeting occurs. That is in West Concord, Massachusetts, which is, I think, not too hard But it is small. to get to. It has 21 claims. So it is a small site.

CHAIRMAN MELIUS: We are not going to have significant turnout there, I can imagine.

MR. KATZ: That may be. We haven't been in Tennessee in quite a while.

CHAIRMAN MELIUS: Tennessee -- the only other question I have is the petition we don't know about yet, but my understanding is it is on its way to the Federal Register,

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1	which is Rocky Flats.
2	MR. KATZ: Rocky Flats.
3	MR. RUTHERFORD: Yes, Rocky Flats
4	is qualified. It is a qualified petition now,
5	and we will have Rocky Flats done before that
6	September Board meeting. In fact, we would be
7	presenting it at that September Board meeting,
8	but we will be presenting ORNL probably in
9	June.
10	MR. KATZ: Okay. Well, in terms
11	of timing then, it makes some sense to
12	Colorado. If the ER is going to be ready, to
13	present it locally would be great. Does
14	anybody have any other thoughts about that?
15	CHAIRMAN MELIUS: And hold
16	Tennessee for consideration for the December?
17	MEMBER SCHOFIELD: I have actually
18	had some contacts requesting that we come to
19	Tennessee, phone calls and emails. I know,
20	since I came on the Board, we have not been to
21	Tennessee. So it has been a long time.
22	MEMBER MUNN: Well, if our two

1	choices are Colorado and Tennessee, it seems
2	more logical to be in Colorado in September.
3	MR. KATZ: In terms of weather and
4	travel, it makes more sense.
5	CHAIRMAN MELIUS: And the timing
6	would be good in terms of the Evaluation
7	Report also.
8	MEMBER MUNN: So Colorado in
9	September?
10	MR. KATZ: And then Tennessee in
11	December? Do we want to be in Oak Ridge?
12	When we are talking about Tennessee, do we
13	have yes? All right. That takes care of
14	scheduling issues.
15	CHAIRMAN MELIUS: Okay. We can do
16	the Electro Metallurgical letter. I have got
17	the editing straightened out, and I will start
18	by first clarifying the editing, and then I
19	will read through the whole letter so you
20	don't get confused.
21	There is a little problem in terms
22	of getting this onto letterhead and

transmitting this, so a little confusion. But if you go down to the second paragraph where it starts, "The National Institute for Occupational Safety and Health," take out those whole two lines, that sentence, and it should be, "The Board respectfully recommends that SEC status be accorded to", colon, which is the usual style of these letters.

So I will start and read this into the record:

"The Advisory Board on Radiation and Worker Health (the Board) has evaluated Special Exposure Cohort (SEC) petition 00136 concerning workers at the Electro Metallurgical Site in Niagara Falls, New York, under the statutory requirements established by the Energy Employees Occupational Illness Compensation Program Act of 2000 (EEOICPA) and incorporated into 42 CFR Section 83.13.

"The Board respectfully recommends that SEC status be accorded to, quote, 'all employees of the Department of Energy, its

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predecessor agencies, and their contractors and subcontractors who worked at the Electro Metallurgical site in Niagara Falls, New York, from August 13, 1942 through December 31, 1947, for a number of work days aggregating at least 250 work days occurring either solely under this employment or in combination with work days within the parameters established for one or more other Classes of employees included in the Special Exposure Cohort.' Close quote.

"This recommendation is based on the following factors: Individual's employ at the Electro Metallurgical site during the time period in question; worked on uranium metal fabrication and scrap recovery related to nuclear weapons production.

"Two, the National Institute for Occupational Safety and Health, NIOSH, review of available monitoring data as well as available process and source term information for this facility found that NIOSH lacked the

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sufficient information to allow it to estimate with sufficient accuracy the potential internal exposures to uranium which employees at this facility may have been subjected during the time period from August 13, 1942, through December 31, 1947. The Board concurs with this determination.

"NIOSH determined that health may have been endangered for these Electro Metallurgical employees during the time period in question. The Board also concurs with this determination.

"Based on these considerations and the discussion at the February 28-29, 2012, Board meeting held in Oakland, California, the Board recommends that this Class be added to the SEC. Enclosed is the documentation from the Board meeting where this SEC Class was discussed. Documentation includes copies to the petition, NIOSH review thereof, and related materials. If any of these items are unavailable at this time, they will follow

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shortly."

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Comments, questions on that?

Okay. Why don't we go on and start on our

Board reports, Subcommittees and all? Mark,

DR, top of the list.

MEMBER GRIFFON: We had a meeting. I forget the date, but we had a meeting between the last Board meeting and now. several things we quess were looking There are several action items that came out either of this related to the 10-year recommendations previous our questions orabout QA/QC, and we came out with several actions which SC&A and NIOSH hopefully remember these actions. Ιf not, we putting them on the record today.

One of them is for SC&A to look at the themes of findings in the 11 through 14 sets of cases. Several of these actions that we looked at were to sort of get at this issue of we are well behind -- the Subcommittee is well behind the progress that SC&A is making,

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and we are actually reviewing cases that are often much older than where NIOSH is currently working. So we are trying to sort of think of ways to triage the process.

We have several of these proposals. Maybe I don't have to go down all of them, but several of these proposals to look at to sort of get at that issue. Then I think, at our next Subcommittee meeting, we are going to go over some of those. I am not sure that we need to continue on the path with all of these, but we want to sort of see what they come up with.

to look at the themes. One is Another is for SC&A -- Stu reported earlier that NIOSH is doing a sort of duplicate analysis of some cases that come in with ORAU, and we have asked that, after they report that to our Subcommittee, then SC&A will -- we will assign those cases to SC&A, too, to review. So we will sort of have that set reviewed by three parties.

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A third one is: NIOSH is going to provide a report on what ORAU is doing with regard to their OA/OC program, and some of the questions we discussed there was sort of this of it looked like in their question presentation to us, to the Subcommittee, that they have made a lot of quote, "fixes" in the program over the years, but they never sort of had any benchmark to measure against, like how -- intuitively, it seems that several of these fixes would have reduced the number of sort of data entry errors and other sort of quality errors, but there is sort of no benchmark to measure against.

So we want to see how they are actually benchmarking and how they are measuring their performance going forward, what they have in terms of QA/QC. I think we really want to look at that closely, and then NIOSH said that they are going to give us what they can at the next Subcommittee meeting with regard to ORAU's process.

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The last one is that NIOSH is -oh, another attempt to get at the more current
issues was in the 12th set of cases, NIOSH
took the five most recent cases, and they have
reviewed those cases, and these were already
done by SC&A, but they are going to come back
with their analysis on those.

So we have been sort of plugging We are right away. now on the seventh, eighth, and ninth set in various stages of review on all those findings, but we thought, to get more at the current issues, going to try to do a triage process up where SC&A -- SC&A is far ahead of us. We want to look at the more current cases, see if still finding the kind of are same we findings, same kind of issues. We want to sort of get a sense of that, and then maybe reassess our path forward on doing all the findings and going through that process.

The last item, I guess, is NIOSH we did discuss at the last meeting some of

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the recommendations from the 10-year plan, and NIOSH is going to provide us with an assessment on some of those items.

They said they were at various stages on some of these, such as timeliness. I think the least far developed of the issues is claimant-favorability, sort of getting a sense of the degree of claimant-favorability in the Dose Reconstruction Program.

Then the last one, which I think is the most mature -- Stu might be able to speak to this more directly as he walks in the room. The most maturely developed is the overestimation question.

Stu had mentioned the possibility of NIOSH sort of not doing overestimates Ι think anymore, and now they are reconsidering some options. For instance, one example which was brought up at the Committee meeting possibly was to overestimates for skin cancer cases, because they often come back with multiple cancers.

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So I think they may have ruled out eliminating the overestimating process completely. In other words, they are going to use it sometimes, I think, but they are different proposals looking at of maybe cutting back on the extent to which they use the overestimating approach.

Apparently, eliminating the overestimating approach completely was going to be a cost issue. There was actually a lot of efficiencies gained as far as at least -- Stu maybe can expand on that, but that is what -- and we asked just to maybe develop this in writing, and come back to the Committee with sort of some proposals in between. I don't know if you want to --

MR. HINNEFELD: Yes. There is a fairly high percentage of cases that use some sort of expedient approach, and the savings is at least -- I can't remember exactly, but it is at least half the time it takes -- it takes twice at least twice as long to do a full dose

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reconstruction as it does, on average, an expedient one. So that is twice as much time and, therefore, twice as much money dedicated in order to keep the same level of production.

So that just doesn't seem to be feasible in light of all the other competing priorities, but we are pursuing some other possibilities. Like Mark was talking about, if we don't overestimate skin, what is the impact of that?

We are approaching some DOE sites that don't routinely give us medical exposure information when ask for we exposure histories, and saying: can you make this a part of your routine response to us when we ask these? Because a common overestimating approach is to use sort of the default values for number of annual X-rays, and then if it comes out using the default you're over the 50 don't percent, then you get the actual exposure information which, of course, is not very helpful in a couple of ways.

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At some sites, that would be a terrifically larger burden. So some sites aren't going to be able to give us the exposure -- their medical X-ray exposure information with routine requests, but there are some sites we might be able to make some headway on it.

So we are kind of nibbling at some edges right now. Then any real large-scale change would involve the commitment of quite a large amount of resources that would then be distracted from other parts of the program or the other things we are trying to accomplish. So we are a little hesitant to go marching real aggressively down that path.

MEMBER GRIFFON: The other thing,

I think, we had quite a bit of discussion on 
- and Stu mentioned earlier in his

presentation the sampling of two per month.

Actually, in the last year our Subcommittee

transcripts, which I was reading this morning,

it was saying two per week, but maybe that was

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modified. I don't know.

MR. HINNEFELD: I believe it might be two per week.

MEMBER GRIFFON; Okay. Anyway, that would have resulted in approximately two percent. That was sort of the idea, yes. But another part of our discussion was the concern of whatever sort of analysis we do but also what process ORAU has in place shouldn't be sort of this find and fix approach.

In other words, if NIOSH is doing these two per week or month or whatever, and the Committee reviews them and then we find a problem in a certain TBD and fix it, that is not getting at the higher level question of quality control of the entire program.

So we want to sort of step back and look at the overall are we getting a reduction in errors from the quality changes that have been made over time in the program? So that is something we are trying to grapple with, of what is the best way -- with these

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different approaches, what is the best way for the Subcommittee to do that?

So at the next meeting, we are going to have a bunch of these updates and, hopefully, fine-tune where we are taking this to get a handle on the QA/QC questions, and other themes, I should say.

Some of the other themes that were brought up were -- just off the top of my head, it was: often we have the question of placement of workers. This comes up with neutron dose reconstructions a lot where, if neutrons were only on certain sites in certain buildings, then it comes down to NIOSH being able to assure the Work Group or the Board that the workers only in certain were buildings over the course of their career. So it is always a question of placement.

That is at least one example of another theme that we have seen running through a lot of our findings. I can't off the top of my head come up with others, but we

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are going to look at that at the next meeting as well.

Otherwise, the Committee just continued on plugging through in our normal process, going through the findings of the seventh, eighth and ninth set. I don't know if we got to the ninth set, but at least seventh and eighth set of cases.

CHAIRMAN MELIUS: Okay. I've got a couple of comments. One is, we have been doing this same plan -- we have been following this plan for 10 years in terms of -- I think it was the first year we set out the original plan, if my memory is correct, of how we would do dose reconstruction reviews.

Ι don't think we followed it absolutely, but we have pretty much stuck to that plan, and to some extent, maybe it is time to sort of rethink that plan or, certainly, adjust it at this point in time.

I think there have been some changes to the program. NIOSH is stepping up

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its QA/QC, sounds like, and working on that aspect of it, but I think there is also -- we Board, provide are supposed to, as а independent review on are dose reconstructions accurate and so forth, and I think that is more than just QA/QC. It is bigger. Ιt includes the Site Profiles, the everything that is associated with the program that goes into making а good dose reconstruction.

So we have not done a lot of blinded reviews. Other issues like that, I think, would be worth sort of rethinking going forward. I think the way you are talking about sounds fine, but I would encourage the Subcommittee to sort of take a broader look. Do we need to adjust the process, the mix, the numbers, whatever, to do this?

Certainly, I think, given that this is a charge to the Board from Congress in the original legislation, are we doing an adequate number of what we are doing, and do

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we need more resources either from the Board level or from the NIOSH level in terms of responding to these reviews to get this job done in a way that it should be done.

I really think now, with the 10year review and some of the changes in place,
now would be the time to start to look at some
of those questions also. I don't think you
would do it in your next meeting, necessarily,
but certainly coming back, some Board
discussion, and figure out how we approach
this, and what is the best way?

MEMBER GRIFFON: I don't think, my intent wasn't to drop other issues. There has been a focus on this QA/QC thing, because we have seen a lot of those, and we do want to get a handle on that. But part of that question to SC&A to look at those other themes was just that, to look at some of the scientific findings that we may have seen over the years.

CHAIRMAN MELIUS: Paul?

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MEMBER ZIEMER: I think Dr. Melius' points are well taken, and it would seem to me that it makes sense at this time to ask ourselves whether or not the process that we are using is, in fact, doing what we want it to do, and maybe even, in evaluating that, to report to the Secretary on that.

I think we probably are due for another report anyway. We are up to about 200 completions now with the ninth set. I think it has been a little over 20 percent now, but it seems to me that we report not only what the findings have been, but whether or not our process is effective and how we might be changing it.

We do owe the Secretary something.

I don't know when the last report was, but it seems to me it has been several years, and dose reconstruction is our thing, in a sense, and we have to critique, as you have suggested, are we doing it the right way? Do we need to change it? And then, how effective

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has it bee, and what can we do to make it more effective?

CHAIRMAN MELIUS: Yes. I agree,
Paul. And I think that one of the problems we
have gotten into is we have sort of dug a
little hole here. We are always catching up.
We keep assigning. We have SC&A doing these,
and we are, what, six behind or six sets or
five sets behind? I don't know.

So we always feel like we are not quite ready to report to the Secretary yet, because we are not sort of contemporary with the program, which is a dynamic program. There have been lots of changes in it, and I think we need to catch up, not saying we shouldn't report now or do that and make changes, but I think let's examine it in that context, that, yes, here is where we think we are. This is what the results have been. This is how we think we can do it better.

MEMBER ZIEMER: Right, and if we are falling behind, we have to evaluate why is

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1	that, and what can we do to improve that? The
2	workload, is it realistic or do we need more
3	resources or what do we need?
4	CHAIRMAN MELIUS: Yes. Is it at
5	the NIOSH end? Is it our end? Is it I
6	think let's reexamine that and, as a Board,
7	make a decision on what we should do. Yes,
8	Bill?
9	MEMBER FIELD: Yes. I was just
10	wondering. You have been doing this for 10
11	years now. I was just wondering, during this
12	whole process, has there been any substantial
13	changes that resulted form these reviews as
14	far as process or as far as review?
15	MEMBER GRIFFON: I think, along
16	the way, there have, yes.
17	MEMBER FIELD: Because I guess
18	that is part of it, is just, does this work or
19	not? Are things being addressed that are
20	deficiencies that are documented in the
21	process?
22	I know, going through these, a lot

of the things I see as maybe limitations are not things that I found myself. It was SC&A pointing them out to me, and then it is whether or not you agree with what they say or not, but I am not sure on my own how many of these I would have seen. Probably few.

CHAIRMAN MELIUS: I think it is a complicated program, and a lot of technical information that goes into each of these dose reconstructions, especially at the more complicated sites. It is daunting, and lots of issues to be dealt with there.

I think one of the hesitations we have -- not to repeat myself -- is that it has been dynamic in terms of the changes, and you have the SEC reviews, you have the procedure reviews going on. You have Site Profile reviews. All of those feed in different ways into the dose reconstruction process, and at the same time the actual dose reconstruction reviews are sort of trailing those by the nature of the way we select cases and so

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forth.

So I am not sure we are always contemporary with that. That is why I think not only do we have to rethink how we do the dose reconstruction, but sort of how we pull all that information together.

MEMBER FIELD: I think what has really been helpful to me is just understanding the process better. That has been a big help.

CHAIRMAN MELIUS: Yes, Brad?

MEMBER CLAWSON: I was just going to say, you know, from when I came in almost five years ago, what I have seen in changes in the dose reconstruction stuff -- it is real hard to be able to say, well, we change this and this and this. There's been lots of little things that have come up about it, like different Work Groups and so forth, tracking what has been done.

I think we have made really -- I think we have made a substantial difference,

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and I think we have made it a lot better. But 1 2 I also agree with Paul that we need to look at 3 it as we have made these changes; now do we need maybe to look at it from a little bit of 4 5 a different perspective? 6 To tell you the truth, I really 7 feel personally that it has made a lot of difference, and it has been good for me to 8 understand how the process actually really has 9 10 worked. 11 CHAIRMAN MELIUS: other Any comments? Okay. Thank you. 12 Thank you, Mark. 13 Wanda, Procedures? MEMBER MUNN: This will be a lot 14 15 shorter and much less detailed than that, 16 primarily because there has been no change at all in transpired 17 what has since our teleconference, 18 at which time Ι reported 19 briefly on where we were. 20 Procedures is at an interesting point, because most of the Technical Basis 21 Documents and most of the crucial procedures 22

that are necessary for the operations that we have, have already been done, published, and are well underway, with the action items that result from the scrutiny that is given them.

As a result, a large number of the action items that still remain in our database are attached to documents or activities which are no longer as pertinent as they once were.

That is to say, the documents have been superseded or procedures have already been changed.

That being the case, we have the problem that has been discussed here quite extensively with regard to resource management, what we can do with what we have.

The pressures on our resources have made it necessary for us to begin to extend the time between our meetings.

We no longer meet on a very regular basis every six weeks or so. It just simply is necessary for us to have more time to allow both the agency and our contractor to

2	of the demands on their time.
3	We are making significant
4	advances, I believe, with respect to our
5	electronic database. We will have, we hope,
6	by our next meeting one or two additional
7	items which we feel crucial for the operation
8	of the Subcommittee itself incorporated into
9	that database.
10	With any luck at all, in the next
11	very few weeks, we will be issuing our draft
12	agenda and action item for our upcoming
13	meeting, the next one of which will be April
14	11th.
15	I have no further information to
16	provide unless someone has questions.
17	CHAIRMAN MELIUS: Questions for
18	Wanda? MEMBER MUNN: Thank you.
19	CHAIRMAN MELIUS: Brookhaven?
20	MEMBER BEACH: You are going to be
21	hearing from us tomorrow
22	CHAIRMAN MELIUS: This is a
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provide the materials that they need, because

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preview, yes.

MEMBER BEACH: -- on the 83.14.

So I am not going to go over the Work Group recommendations or anything on that today. I am assuming we will address that tomorrow. However, we had a meeting on February 21st.

Part of our discussion was on the 83.14. The other part of it was on -- we met last year. I believe it was in January of 2011. We had 13 open action items from the ER matrix. So we have asked NIOSH to look at those and send out a report to the Work Group on those open items to determine where they still fall within looking at the 83.14 that we are going to discuss tomorrow.

The other item we discussed is the Site Profile issues. We had a report, I believe, in 2009. We identified -- or SC&A identified 12 Site Profile issues, and so we have asked NIOSH to take a look at part of those.

Most of them actually fell to

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1	NIOSH, and some of them to SC&A to actually
2	review those and see again where they fall
3	based on the 83.14, and that is where we are
4	at now.
5	We are waiting for NIOSH to report
6	back on their issues and decide when we can
7	meet again in the future. So, hopefully, what
8	did you say, Wanda, in the next six months?
9	MEMBER MUNN: I would think so,
10	based on our expectations of the agency and
11	the contractor.
12	MEMBER BEACH: So while we have an
13	83.14 before us, we do have more work that the
14	Work Group is still ready to complete.
15	CHAIRMAN MELIUS: Questions for
16	Josie? Thank you. Fernald? I guess, again,
17	a preview.
18	MEMBER CLAWSON: We met on
19	February 9th and, as many of you have seen, we
20	have sent out numerous reading materials for
21	you to review.
22	We are coming to an end with

Fernald, and this is why we have sent out -we hope. Okay, we are trying to come to an end
with Fernald. Part of the issue is it is a
very difficult site, and we are working
through it.

At the last meeting, some of the information really didn't get to the Work Group in time to be able to have either side to be able to review it again. That was on both sides, but those papers have been sent out to you for you to be able to review, and personally, I think you will enjoy it tomorrow, but it is — in my sentiments, it is coming to an end. You'll enjoy it.

CHAIRMAN MELIUS: The end is near. The end of something is near.

Hanford is mine. I'll do that and I will probably ask Arjun to help me a little bit on this one. We are juggling -- there is some ongoing work that NIOSH is doing out at Hanford. We have sort of a combined SEC that we have been working on that

we have been in the process of updating information on, and then we have a new, relatively newer SEC that we have been working on, and recently completed some interviews out there. I don't know if they have been sort of cleared yet or where those stand, but we are expecting we will do a Work Group meeting coming up, I think, in the next month or two, certainly before the June meeting, and be able to report back then on where we are. It is juggling a lot of schedules here.

Is that a fair assessment, Arjun?

DR. MAKHIJANI: Yes, Dr. Melius, that is a fair assessment. We interviewed the petitioner and his representative on the SEC 155, and the petitioner, as you know, asked us to review certain documents, some of which you forwarded to me.

In reviewing that and preparing for this meeting, I believe that we should try to contact one of the auditors who reviewed bioassay information, and I will try to find

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1	out that contact information. I just did that
2	in preparation for this meeting. So I haven't
3	had time to do that. But I am reasonably
4	confident that we should be able to have
5	sufficient information for a Work Group
6	meeting.
7	The report is pretty much done
8	except for the integration of the interviews
9	into the report.
10	CHAIRMAN MELIUS: Okay, good.
11	Yes?
12	MR. RUTHERFORD: Yes, Dr. Melius.
13	I wanted to add, too, since you are on
14	Hanford, we are going to be an 83.14 will
15	be moving forward with Hanford as well for the
16	June meeting.
17	CHAIRMAN MELIUS: Okay. Do you
18	know when that report will come out? I am
19	just trying to think in terms of scheduling.
20	MR. RUTHERFORD: May.
21	CHAIRMAN MELIUS: May? Okay. For
22	those of you who are on the Hanford Work Group
	· ·

1	with me, we may plan on two meetings,
2	depending on trying to figure out the
3	workload and trying to keep some of these
4	issues separated, because it is a fair amount
5	of stuff to go over, I believe. Good. Okay.
6	Idaho?
7	MEMBER SCHOFIELD: Idaho? There
8	is some updates being worked on.
9	CHAIRMAN MELIUS: And when LANL
10	comes up, I will look at you.
11	MEMBER SCHOFIELD: On some of the
12	documents, the TBD documents, there has been
13	some updating done. When that will be done is
14	up in the air.
15	CHAIRMAN MELIUS: Well, what do we
16	have on the schedule for have you had a
17	chance to look at the schedule that NIOSH put
18	out?
19	MEMBER SCHOFIELD: Yes. It is the
20	end of March.
21	CHAIRMAN MELIUS: Okay, in March.
22	So you think, if we get that in March what
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1	is your thinking in terms of response to that?
2	MEMBER SCHOFIELD: Probably latter
3	part of May or so.
4	CHAIRMAN MELIUS: Okay, thanks.
5	Any questions on Idaho? The K-25 Work Group?
6	MEMBER SCHOFIELD: Gaseous
7	Diffusion Plants?
8	CHAIRMAN MELIUS: I call it the K-
9	25. I'm sorry.
10	MEMBER SCHOFIELD: Yes, we met,
11	and we have actually closed quite a few of the
12	items. So we do need to get back together and
13	finish it out. We have made a lot of progress
14	there.
15	CHAIRMAN MELIUS: Okay. I think,
16	for these which are again, it is their Site
17	Profile reviews. I think when you are getting
18	ready to close out or close to it, it probably
19	would be good to have a presentation to the
20	Board, because, really, it should be the Board
21	closing out these issues, not just the Work
22	Group, and we tend to focus so much on the SEC

portions of them that we don't -- we tend to 1 2 put off Site Profile issues, but since you are 3 making progress on these, I think it would be helpful if you can plan on that when you are 4 5 ready. Thank you. 6 MEMBER SCHOFIELD: I'll make sure 7 next time there's something to present. MELIUS: Well, 8 CHAIRMAN no. Not here. I think we will set some time aside at a 9 Board meeting between NIOSH, SC&A and the Work 10 11 Group. We should spend some time on them, and 12 make sure there aren't issues that people have 13 questions about. I actually think it helps the other Work Groups also in terms of dealing 14 15 with these. 16 Lawrence Berkeley -- I think we have a presentation coming up. 17 So, Paul, I 18 don't think we need to say much. Linde? 19 MEMBER ROESSLER: The Linde Work Group has finished its SEC business, and now 20 are working on TBD issues. 21 We have 22 resolved everything except those that

related to the utility tunnels at Linde.

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big questions that Our trying to address is when were they built and what should the occupancy factors be for them. The Work Group looked at some construction drawings at our face to face meeting January 30th, and then later these drawings were looked at in detail by SC&A and the representative. claimant Then had teleconference to discuss this on 15th.

We think these diagrams establish the dates as to what tunnels were there at certain times. However, we want to really make sure of this. So we are trying to gather some of the Linde workers for a meeting in Buffalo, and interested parties will be there, so that they can look at them, and we can have a discussion about the tunnels.

So we hope to have this set up. I don't think it is set up yet, but we hope to have this meeting with the workers in Buffalo.

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1 CHAIRMAN MELIUS: It has been a 2 mild winter in Buffalo. 3 MEMBER ROESSLER: Yes, so far. Ιt 4 was so far in Minnesota, too, and now it is 5 getting dumped on. 6 MEMBER MUNN: Winter isn't over. 7 CHAIRMAN MELIUS: It is not quite over with. You are right. Good. Los Alamos? 8 I think we talked a little bit about that 9 10 I guess I am trying to understand the schedule now if NIOSH gets this additional 11 12 information. You are nodding your head, Jim -13 - or LaVon. I am not sure who is -- I am just We are going to be out there in 14 concerned. 15 We are going to be on the spot. 16 DR. NETON: Yes. I have an update from Greq Macievic, who is 17 our point contact for Los Alamos review. They are out 18 19 there, as you know, right now doing a data 20 capture effort. When they finish this data capture effort, they feel that they will be 21

able to finish their review. It should answer

most of the questions they have.

They are tentatively looking at sometime around the third week of April for a Work Group meeting.

MEMBER GRIFFON: Okay. That is an update from what I had. I guess one concern we have is there was a long delay, and we heard about that earlier, with getting access to the documents. I think that the initial sort of request was viewed from the site standpoint as being too broad.

Apparently, they had a conference call, and might have come to terms on this. I am not sure SC&A was in that loop. I don't think they were. So I am not sure what they are going to come out of this data capture effort with and whether it is really going to answer all the questions, but we have the same concern, that we want to have a meeting far enough in advance of the June meeting to be able to say something in the June meeting.

CHAIRMAN MELIUS: Is there -- on

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1 the top of my head, but tell me if it is a bad 2 But is there some way we can put SC&A 3 in touch with NIOSH sooner rather than later the information we 4 to make sure that 5 complete for everybody getting is as 6 possible? 7 There is always -- you don't know until you have seen and interpreted. 8 don't want to overdo it, but I just hate to 9 10 get to the end of April or the report comes say, well, 11 we don't have this out, and 12 information. 13 DR. NETON: Right. Ι have a further from Greg that 14 note says he has 15 notified SC&A of these data capture efforts, 16 and that he will send them responses to the action items as they finish them, and not to 17 wait until just before the Work Group meeting 18 19 to dump them on them. 20 Okay. CHAIRMAN MELIUS: So essentially, the White Paper. 21 22 As we complete them, NETON:

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1	they will be trickled over, I guess, as
2	opposed to having them dumped on in a whole
3	series of things.
4	CHAIRMAN MELIUS: Joe is behind
5	you.
6	MR. FITZGERALD: I am right behind
7	you. Greg and I have been in contact, and I
8	certainly empathize with him in terms of
9	trying to get anything quickly out at the lab,
10	but what we are going to be doing and I
11	have been there before. What we have been
12	doing is, in real time, as he gets
13	information, he is going to be in contact with
14	me, and we are going to try to do this as much
15	as possible in parallel.
16	So we are not going to do one of
17	these serial things. So we are going to try
18	to make up some time and push this thing
19	along.
20	CHAIRMAN MELIUS: Okay, excellent.
21	Appreciate it. Joe, we noticed you smiling
22	during the earlier discussions of DOE, when we

1	were talking about Los Alamos.
2	MR. FITZGERALD: I have been where
3	Greg is now, and trying from a Headquarters
4	standpoint to move a national lab is always
5	interesting.
6	CHAIRMAN MELIUS: It is
7	challenging, to put it politely. Good.
8	MEMBER GRIFFON: Third week in
9	April, hopefully.
10	CHAIRMAN MELIUS: Yes. Mound.
11	Mound will be our last one.
12	MEMBER BEACH: Mound last met on
13	November 7, 2011, for a Work Group meeting.
14	We then met in Germantown on January 6th.
15	There are three issues that we are
16	still working on: radon; data adequacy and
17	completeness; and tritides. The same three
18	issues we have been working on for the past
19	year. There are some small pieces of each one
20	of those that the Work Group is waiting for
21	White Papers from NIOSH and SC&A.

On the radon issue, we are looking

1	at drawings right now between R/SW. There are
2	some parts within data adequacy and
3	completeness that we are waiting for NIOSH. A
4	thorium issue is one of them, and then some
5	earlier time periods.
6	The other issue, the tritides,
7	SC&A does have a White Paper that is due to
8	the Work Group mid-March, and I understand
9	from Joe that we should have that within the
10	next couple of weeks.
11	Beyond that, our next Work Group
12	meeting is scheduled for April 10th, and I do
13	hope to have all those pieces put together so
14	we can give a full report at our June face to
15	face Board meeting.
16	CHAIRMAN MELIUS: Okay. And
17	resolved?
18	MEMBER BEACH: Yes, and resolved.
19	That is what we are shooting for.
20	CHAIRMAN MELIUS: You may convince
21	us to spend three days in Santa Fe.
22	We will come back to some further

1	Work Group and we have done our
2	Subcommittee, so further Work Group reports
3	tomorrow.
4	We have a presentation now. This
5	is Sam Glover day, I guess, here. Hangar 481.
6	Don't worry, LaVon. We haven't
7	forgotten about you.
8	DR. GLOVER: Are we ready?
9	CHAIRMAN MELIUS: We are ready, if
10	you are, yes.
11	DR. GLOVER: We have it up. I
12	believe the petitioner has provided us also a
13	presentation they would like to provide, and
14	we have that on a memory stick that we will
15	load when you guys are ready.
16	I am going to present just a brief
17	update. We have presented Hangar 481 several
18	times, but just to kind of refresh everybody's
19	memory, it has been a little while.
20	This is Hangar 481. It was also
21	known as Ross Aviation to some folks who were
22	it was a company that did some of this

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work. We are just going to very briefly walk through some of this, if it responds. I am afraid if I push the process, I will break something.

CHAIRMAN MELIUS: Talk slow.

DR. GLOVER: Talk slowly. That, with the encrypted drive in at the same time is making it very slow. There we go. Okay.

briefly, is Very Hangar 481 located Kirtland Air Force Base in Albuquerque. Ross Aviation operated Hangar 481 during the covered period. They actually began around 1970 or even before that, and they continued much later, but I will say that the type of contract -- the covered period is determined to be a fairly narrow time frame -provided air transportation of personnel and equipment as using government owned aircraft government owned facilities, especially with Department of Energy operations at Sandia National Laboratories as well as others.

They transported equipment,

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including packages, including radioactive materials associated with the atomic weapons program.

This petition was received February 27, 2009, and it is an 83.13. September 8, 2009, it qualified. December 18, 2009, an Evaluation Report was issued. We presented at the February 2010 Advisory Board meeting.

A delay was requested at that time, by the petitioner, until Freedom of Information Act material could be provided to him. By July 2010, that FOIA had been completed, both by DOE and NIOSH. September 23, 2010, a revised Evaluation Report was issued. It was issued with a fairly minor change in that we had gotten a picture wrong. So we chose to go ahead and update it at that time.

We re-presented at that time to the Advisory Board meeting for the November 2010. On November 3, 2010, the petitioner

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submitted a FOIA request for information that was not in NIOSH's possession at the time. So we can't respond, obviously, to information that is not in our possession.

January 21, 2011, the FOIA Office responded to the November 3rd request, explaining the material will not be in our possession for some time as they are being reviewed by Department of Energy, and that a FOIA should be resubmitted in June of 2011.

In January 2011, NIOSH, petitioners, as well as other Members of the Board got a very nice tour of Hangar 481 by Department of Energy and Office of Secure Transport. They walked us through the entire facility. I think in other cases I have shown some photos, and certainly provided those to the Board.

June 2011 the Office of Secure Transport responded to questions provided by both NIOSH as well as the petitioner. In August 2011 an addendum to the Evaluation

Report was issued for Hangar 481, and we represented again in August 2011 at the Advisory Board meeting.

The petitioner requested an extension of the matter from the Board, so the FOIA request should be submitted. October 2011 the petitioner submits an official FOIA request, and in November withdrew that FOIA request.

In February 2012, we provided a brief summary to the Advisory Board for your consideration. We believe that all concerns expressed by the Advisory Board in these various meetings have been addressed. We know of no open issue that the Advisory Board has raised.

Summary of the external dose feasibility. External dose records exist for many Ross Aviation personnel, and the REIRS reported data had been verified using Eberline data from 1990 to 1994.

Data from the 1994 REIRS report

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was found to be incorrectly entered into the database -- we had a disparity; it didn't make sense -- in which they actually had entered the lifetime total instead of the annual dose. That has been corrected in this addendum, and the Department of Energy was notified as part of that.

Individual results from We used the highest dose received to records. estimate dose for all personnel I didn't show the graph in this and Aviation. The slides are available, go back to that. but that is in the order of around 70 millirem a year, is the highest dose received in any one year, and that is irrespective of where they were or what activity.

There are things that are done on the hot pads, and there are some different discussions that have occurred, but there was a fairly significant amount who were monitored, including people who had nondestructive testing analysis. We used

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those results for everyone.

So we did not get data from 1996. There was like a one month or one and a half month period which was not covered. In that case, we are going to use the highest annual dose from previous years for that two-month period. So again, we are using the highest dose received in the entire year previously to bound any external dose for all employees.

The circumstances and locations related to a pilot's locker in radiographic activities which are done off-hours. There is a nondestructive testing of the planes that was done off-hours at Hangar 481.

We believe that -- the subsequent discussion is that where the lockers are, it is near the plane. There was an elevated reading that was described, and that the pilot left the badge in the locker during the nondestructive testing analysis.

For this facility, we don't really see there is any credible potential for

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neutron exposures. Potential doses from offhour radiographic testing would have been included in the reported personal monitoring data.

The ambient environmental external doses are included by using the existing personal monitoring. So we don't have to -- since we are using that for everyone, there is no reason to have an environmental external dose model. X-ray examinations for personnel are not included because medical X-rays were not performed on site at Hangar 481.

Regarding internal dose feasibility, we believe no radioactivity was stored or handled at Hangar 481. Radioactive materials that were handled by workers at Hangar 481 were in sealed Department of Transportation compliant containers, and monitored in accordance with DOT regulations to verify radiation and contamination levels.

We have results, certainly not of all of those, but of available radiological

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surveys performed on these packages, and transport aircraft support this premise. So the records that are available to us support that it was under control. Whether that happened in the hangar or on a hot pad, it seems that the facility and the operations were controlled.

There was no bioassay. There is no bioassay program for these people. There was no wipe data taken, other than what Sandia -- or before it would have come on site, you know, the facility who would have done it. So we have no records other than what Sandia generated, but not -- there are records of the plane being surveyed annually or at some infrequent basis, but they also came up without any contamination.

So based on available information on the radiological program and potential for internal exposure sources, NIOSH concludes that internal radiological exposures to Ross Aviation employees resulting from services

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1	rendered for the DOE at Hangar 481 are
2	unlikely to have occurred.
3	Sandia National Laboratory, being
4	an adjacent facility, was used to provide a
5	bounding estimate of the dose from ambient
6	environmental internal dose during this
7	period. Sandia does not have a large ambient
8	environmental dose. However, we felt that, it
9	being co-located in the same area, it would be
10	an appropriate bounding evaluation.
11	So the summary is that we believe
12	internal and external for this time period,
13	beta gamma, occupational medical X-rays as
14	well as internal is feasible.
15	CHAIRMAN MELIUS: Questions for
16	Sam. Yes, Bill.
17	MEMBER FIELD: Sam, you mentioned
18	there were surveys done in the containers on
19	the outside for contamination.
20	DR. GLOVER: Yes, sir.
21	MEMBER FIELD: Were you able to
22	see any of those reports? I'm just wondering

1	how they were done. Do you know if they were
2	because you said there was no swipe data.
3	DR. GLOVER: It would have been,
4	as they left Sandia, we have records showing
5	what their wipes were as it was transported
6	off site.
7	MEMBER FIELD: Okay. So you have
8	wipes. Did you see any evidence of
9	contamination?
10	DR. GLOVER: The results that I
11	recall and have seen I haven't looked at
12	them in the last very shortly, but
13	everything seemed to be compliant. You know,
14	it wouldn't have been able to get off site.
15	Sandia had to meet the requirements to get it
16	off the facility.
17	MEMBER FIELD: Just wanted to
18	check. CHAIRMAN MELIUS: Any
19	other? Yes, Brad?
20	MEMBER CLAWSON: I think Sam
21	already knows what my issue is. It is because
22	of the law that we can only claim Hangar 481.

1 Is that correct? Because it is a facility? 2 Here is my issue. These planes 3 were owned by DOE. They flew for DOE, and we can't claim that because it is not a facility. 4 DR. GLOVER: 5 And what you are 6 talking about is when they are in the flights, 7 if there were other exposures that occurred as they traveled to other countries or other 8 activities. It is really when they are at 9 Hangar 481 is when it is at 10 the facility. Otherwise, they would be under the 11 12 courier effect, like you had for Savannah 13 River. So that is correct. But the pilots were badged, and their results are being used 14 15 as part of our analysis. So we haven't tried 16 to parse that. Okay, because you 17 MEMBER CLAWSON: 18 said about the swipe data on the containers 19 and so forth. Did they have a dose rate on 20 those containers, too, along with that swipe information? 21

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DR. GLOVER: It would have had an

1	external dose rate registered on it. That is
2	correct.
3	CHAIRMAN MELIUS: Paul?
4	MEMBER ZIEMER: Just a
5	technicality. You say you can reconstruct
6	internal dose yes, internal that you can
7	reconstruct it. In reality, it is not
8	applicable, I think, is more correct, because
9	you are not going to reconstruct any, are you?
LO	DR. GLOVER: We are assigning zero
11	except that we are assigning ambient dose from
L2	the site.
L3	MEMBER ZIEMER: I got you.
L4	DR. GLOVER Yes, sir.
L5	CHAIRMAN MELIUS: Any other Board
L6	Member questions? I believe that we may have
L7	the petitioner or petitioner representative on
L8	the line.
L9	MR. ARMIJO: Yes, that is correct.
20	This is Roberto Armijo.
21	CHAIRMAN MELIUS: Okay. Sir, we
22	have received your written communication to

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the Board, and that has been distributed to all of the Board Members. So if you wish to speak and summarize that or I don't know if there are other points that you would like to make, go ahead.

MR. ARMIJO: Yes, and I am here at my office location with the petitioner, [Identifying information redacted], and we did submit a letter to the Board on February 22nd after receipt of notification that this meeting would be held.

Earlier today I emailed a PowerPoint presentation to Dr. Glover and Mr. Kinman which, I understand, is on their computer, and they may have transferred that to the folks that are there in attendance.

I apologize that resources wouldn't allow me to be present, but if that presentation is available and could be somehow displayed, it may -- I would like to just simply walk through it, and maybe that would help to underscore the points that we tried to

make in the letter submission.

CHAIRMAN MELIUS: That would be fine, and that presentation is now up, but our computer here is a little slow, but I think it should -- do you want to move it forward? Okay, we are okay. So go ahead. We are on the title slide now.

MR. ARMIJO: Okay. What I will do then is I will just simply ask if we move to each slide, and I will try to move through the first several of these quickly because it pretty much duplicates what Dr. Glover just said. But I think it is important to keep some of the points in mind. So I would like to go through them in sequence.

So if we go to the second slide, the Hanger 481 site history, it is indeed located on Kirtland Air Force Base here in Albuquerque, and it has been located there since 1984.

Dr. Glover pointed out that Ross

Aviation had been in operation all the way

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back to 1970 and possibly before, and indeed there are contracts with DOE or its predecessors all the way back to that time that Dr. Glover was good enough to locate and share with us early on.

The 1984 date, though, would be when the facility was moved to Kirtland Air Force Base, and although we don't know all the reasons for that, I believe that that was due, in part, to security concerns that might be better addressed on the Air Force Base than at the prior location which was located at the west end of the -- generally, the west end of the normal airport here in Albuquerque.

Ross Aviation actually conducted its operations and they were based out of this Hangar 481 during the entire period we are talking about and even before, and through this entire period, of course, as I think it is well understood, they had contractual agreements with DOE.

It served as the base of

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operations for this air transportation of personnel, equipment, and radioactive materials associated with the atomic weapons program.

If we can move to the third slide.

Dr. Glover, I think, went ahead and summarized these dates. This SEC petition has been on file since February of 2009. It actually qualified for evaluation in September of 2009, and an Evaluation Report was issued fairly promptly after that in December of 2009.

We did attend or participate in a hearing conducted on February 10th of 2010, and we did request the opportunity to present a FOIA request at that time to obtain information, as Dr. Glover indicated really wasn't available.

September 10th of 2010, there was a revised Evaluation Report issued with an updated photo, and that probably would be the photo of the hangar over on Hangar Air Force

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Base 481. The Evaluation Report was presented, as shown on Slide 4, at a meeting in November 2010, and at that time it was noted that there was some information that still was not available and needed to be available to really fully review what was happening with this petition.

Moving to Slide 5, January 21st of 2011, the FOIA Office of the Center for Disease Control reportedly responded that the November 3rd request for information made by NIOSH could not really be in their possession until the materials were reviewed by the Department of Energy, and at that time it was expected that those materials, as far as the review is concerned, would not be really available until June of 2011.

So in this instance, the petitioner has been trying to stay with the process, but this process has been ongoing and, as time has gone by, fairly significant volumes of documentation were located, and

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then there needed to be time to digest the information and I think, as will be shown in my presentation, in spite of the information that has been located to date, there is still more to be done.

Now in January of 2011, NIOSH invited myself and [Identifying information redacted] to attend a tour of Hangar 481 that was sponsored, as Dr. Glover said. given the opportunity to view things, and Dr. pictures, Glover took numerous including pictures of the outbuildings that had warnings on them of various types of toxic materials that may be present or had been present in the past, and containing a significant amount of industrial type maintenance equipment that either was present or that there was evidence of its presence in the past.

Those photographs, I think, have been shared with the Board, and we were cautioned, although we would turn in questions, that the -- we were cautioned about

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security concerns related to observations and information, which we fully respected, and appreciated the opportunity to see what was present.

Time passed, and in June, on Slide 6, responses were reportedly provided by the Office of Secure Transport to NIOSH, which then precipitated in August of 2011 the addendum to the Evaluation Report for Hangar 487.

It happened fairly close to the Advisory Board meeting scheduled in August, and we had access to that addendum in August, and the Evaluation Report was presented to the Advisory Board recommending basically to deny our petition at that time.

Turning to Slide 7, we did request an extension of the matter from the Board so that a FOIA request could be submitted, and it took us a while to kind of figure out what we were doing, but in October of 2011 we did submit an official FOIA request.

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Fairly promptly after that FOIA request, which basically went through the list of assertions and representations that were made in the August report, we were informed by Department Health the U.S. of and Services, Public Health Service, Centers of Disease Control, CDC, that the petitioner was is being classified as а Category 1 requester and was, or will was to charged for duplication, search time, review time.

As a result of discussions on page 8, Slide 8, we were informed by a NIOSH representative that our FOIA requests were going to require extensive efforts to locate responsive information and may entail the compilation of documentation estimated to be in the range of 25,000 pages.

As noted in the letter that I turned in as an attachment to the submission we made on February 22nd, our resources and what is available to myself in representation

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of the individual who happens to be the petitioner in this case simply did not include a budget for that type of a process.

In my mind, I felt that it wouldn't be fair to say, well, go ahead and do that, and then get a bill and say, well, we can't and won't pay that, and in honesty and in due respect of what may have been an over-request, we withdrew the petition because of economic reasons, and I feel we were forced to do that.

felt that there indeed We documentation we needed to review in order to verify the accuracy of the statements that were made by the OST to NIOSH, and we are not questioning the honesty of it, but I think, as some of the questions that have just been posed allude to, there is a need to know that indeed there were the different types and information done to satisfy concern that the information available indeed genuine, accurate, and reliable to base

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a decision on that there was sufficient evidence available to determine what the dose exposures may have been of the workers at Hangar 481.

Here, even though I think that the operations of Ross Aviation were broader than just the hangar building, and our inspection indicated that the flight lines and outbuildings and forth and the like so contemplated a larger area, we are limited -unfortunately, the way this was set up as far as a site -- to the building itself.

Moving to Slide Number 9, insofar as the petition overview is concerned, NIOSH provides now a brief summary to the Advisory Board for your consideration. Now they state that they believe that the concerns expressed by the Advisory Board have been addressed, but respectfully, the petitioner believes that the concerns expressed by the Advisory Board and the views held by the petitioner have not yet been addressed.

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Slide Number 10 then gets to the summary of the petitioner's concerns. I have tried to crystallize this down to some points that I think need to be made. There is other details, I think, that are also important.

The U.S. Department of Labor is the agency, as shown on Slide 10, that has the responsibility for the processing and adjudication, if you will, of claims under the Energy Employees Occupational Illness Compensation Program Act. It is a mouthful, and I will just call it the Act.

Those records reflect a total of nine unique individual workers at Hangar 481 have actually filed 16 cases under the Act, and we believe that that is significant.

The DOL statistics also show that one Hangar 481 worker has been compensated under Part B of the Act. Now we recognize that there may be plenty of people that work in different places, and in support of the letter dated February 21st we attached a DOL

summary sheet that shows the number of claims filed and that, in fact, one person at Hangar 481 was able to establish eligibility under Part B.

As I believe most of the Advisory Board Members are aware, the Part B claims are primarily claims based upon radiation exposure. I would contend, and the petitioner would contend that the mere existence of nine cases, presumably of cancer Ι specifically involved with three former employees of Ross Aviation where cancer is the condition suggests that certainly would suspicion that there be radiation exposure in the workplace; and the fact that of those claims has actually been one adjudicated and compensated would seem underscore the inference that we have that the existence of those claims would certainly suggest that there is an issue of potential exposure.

Turning to Slide Number 11 to

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continue with the petitioner's concerns, the petitioner presented two statements of Hangar 481 workers that deliveries of packages believed to contain radioactive materials were made to the flight line at Hangar quards and badged personnel from Sandia National Labs to be loaded and stowed on aircraft for transport, and these statements differ significantly with OST's statements to NIOSH that such deliveries were never made to the hangar location.

Turning to Slide 12. And we don't know who those persons are or what the basis for the OST assertions are that these packages were never delivered to the flight line.

Given the insistence on the fact that the radioactive materials would have been always loaded and stowed at the hot pads, when there are two former workers who have provided clear statements, and again copies of those are in the submission of February 22, 2012, seems to be an inconsistency by itself that

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would mandate further investigations of what was going on at Hangar 481.

The petitioners question the OST position also that deliveries to the flight line adjacent to the Hangar 481, as opposed to the hot pads, would have been a security violation. Harkening back to the earlier history of Ross Aviation activities that were conducted out of that other place at the west end of the airport, these activities were moved to Hangar 481 in the year 1984, and from time forward that the that was base operations on Kirtland Air Force Base.

I would question why there would be, quote, "a security violation," since all three areas, the two hot pads and the Air Force Base hangar, were all three on the Air Force Base.

One of the things that we asked for would be information to back up that statement that there would have been a security violation. If, as has been proposed

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by OST, there was a security violation to have delivered these packages to the flight line at the hangar as opposed to the hot pads, then I think that it makes their position on exposure suspect, if there was indeed that security violation.

don't say that there was don't know one way or the other whether there All I know is that two former workers of Hangar 481 said that they did load and store guarded packages onto airplanes on the flight line adjacent to Hangar 481 and not at the hot pads. And one of the statements that we in indicated turned that, generally, explosives would be loaded at the hot pads, but that the radioactive packages would be delivered to the airplanes on the flight line.

Obviously, it can't be both ways, and if the people we talked to are correct, I think that that does raise a serious question that needs further inquiry before an adverse action would be taken concerning the

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petitioner's concerns and petition.

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Turning to the Slide 13. The petitioner also questions OST position that deliveries to the flight line never occurred because of the absence of Ross Aviation records or other disclosed records to support that position or assertion.

of the documents that attached to the letter of February 22nd was an oral interview, unsworn, of a former employee of Ross Aviation who reports, I believe, that in the year 2008 after Ross had lost contract, he observed the Ross personnel shredding and destroying the records of Ross's operations. And when asked why they were doing that, in the statement obtained by NIOSH and provided to us in one of the earlier productions of documents, and before the Board is an attachment to my letter, that employee that told to mind his said he was business.

Now some of the contracts and the

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documentation for this is attached to the affidavit of the worker identified in our It is in the affidavit February 22nd letter. which is part of the file, and the full text of which has been previously submitted as one of the attachments indicates documentation for position, and those statements reflected in basically an excerpt from the contracts that declared that those records or portions of those records were DOE property that would need to be surrendered to DOE or otherwise given authorization for disposition.

established Ιt has never been whether those records destroyed were shredded with the consent of DOE or compliance with the contract declaring those portions of the records to be DOE property.

Continuing with the petition's concerns on page 14 -- and this is something that may not necessarily be in the record, but I needed to state it because it came to my attention. A former worker whose dose records

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were provided to DOL in connection with the worker's pending claim under the Act included reported dose measurements that included a couple of measurements at Paducah on two of the specific flights.

It turned out that these two dates fell outside of the worker's time in service, which caused them concern of the accuracy of the reported dose information.

The first of those dose reports that I am referring to was for the date of May [Identifying information redacted] of which as to this specific worker fell during a term when the worker was furloughed. The dates of furlough [Identifying were May information redacted to June [Identifying information redacted of 1996. The worker was not flying, and yet the dose records for that worker reflected the worker had been Paducah, and there was a measurement of May [Identifying information redacted] of 1996.

The second of those dates was

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September [Identifying information redacted] of 1996, and again that fell outside of the term of this worker's work, because the last day that that worker had worked for Ross Aviation was August [Identifying information redacted] of 1996, several weeks before the date of the reported dosage noted at Paducah.

These dose records would be good for this person because they would show additional exposure that may ultimately allow the recognition of that claim. The problem is that both of them fell outside of the dates that the worker actually was employed by Ross or would have had any way to be at those locations.

The significance of that for the purpose of the Special Exposure Cohort petition is that that information, I think, causes the petitioner to express concern as to the validity of the data itself. Again, nothing that I am saying is to criticize or to accuse anyone of any wrongdoing, but instead

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it raises questions about the validity of the data that is being presented to NIOSH and then reported to this Board as the grounds to deny this petition.

Now moving on to Slide 15, one of the concerns that we have is that SEC petitioners are given the burden of proof, notwithstanding that former workers complied with privacy concerns and, in most cases, are really not in possession of documentation to support claims.

So in a way, petitioners like [Identifying information redacted] whose wife worked at Hangar 481 and who died of cancer after that employment, are on the outside looking in and trying to locate information that would not necessarily have been known to them and would have been improper for the worker to have revealed to them.

In addition, SEC petitioners are normal citizens, basically. Now I suspect that there may be some labor organizations

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that can sponsor this type of effort, citizens, I would contend, typically lack the resources necessary to pursue all documentation needed in order to be in a position to fully respond to positions taken in opposition to the acceptance of their SEC petition, and these are some weaknesses of the system that cause us concern in that we know that everyone, including Dr. NIOSH, including the Members of this Board, want to do the right thing and, if there SEC petition, should be should be an it granted and, if not, then not. But it is kind of an unlevel playing field for a petitioner like client to match with my up the governmental entities that are producing the information and, in our view, would have kind of a split loyalty.

On the one hand, I think we are all proud of what our government does. We are all proud of what our agencies that we work for do, and we don't like to be in a position

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of having to disclose information that may be contrary to our beliefs that everything was done right, and may very well have been. But then we also need to get information that would allow us to do the job this Board needs to do, and that is to determine if Special Cohort status is needed.

Turning to Slide 16. Although the OST identified reasons why they felt that certain dose reconstruction was unnecessary, it is uncontroverted that no area dosimetry was performed at Hangar 481.

Likewise, no bioassay program was implemented at ever Hangar 481. NoRoss Aviation facilities monitored for were contamination, and no radiation monitoring was ever performed inside -- was performed inside 481. Those admissions appear Hangar NIOSH's presentations to this Advisory Board, admissions in and those are made the statements made to NIOSH by the OST.

Petitioner would submit that, sure,

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there may be dose badges or other pieces of information like the ambient background at Sandia Base located several kilometers away from this site that one might look at and say, well, we will just go ahead and use that information to bound or to estimate the doses; we can do that just fine, and we don't need a Special Exposure Cohort to do that.

On the other hand, the fact that there wasn't any dose construction done, the badged people went back to Sandia or got on airplanes and left. The few workers there at the base were there, and it is at the base that these nine claims under the Act for compensation exist. It is at the base of operations where my client's wife worked and where the other two clients were located for significant periods of time.

I would like to point out that the two persons who provided information in support of what we are trying to accomplish are distinguished people. One, a pilot with a

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distinguished career who was given the responsibility of piloting dangerous material around the skies of the United States, and piloting extremely important personnel from place to place. These flights certainly were done by Ross, which had a very good record of flying, and certainly was a first rate flying service.

The second of these persons was a 20-year employee who received two commendations for work in helping to construct the destructive testing mechanisms inside the hangar and working on the hangar doors to assure successful completion.

It is not in the record, but at the beginning of his claim, the Labor Department said they didn't even think he worked there, and in spite of that 20-year commendation and in spite of those two specific recognitions of a job well done.

Those are the people who have given us statements that the radioactive

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materials were actually loaded on the flight line and, although there probably may have been some at the other locations, too, I think that that is the quality of the information that is there.

Also on this slide, I needed to mention a couple of other points that I didn't have an opportunity to put into the slide.

One of the things that Dr. Glover asked about — and I hope I can — this is not revealing anything that would be improper — was whether or not thorium based welding rods would have been implemented and used for the maintenance of these aircraft in the hangar building.

documentation that The we presented from NIOSH indicates that the were indeed maintained in Hangar airplanes 481, and the outbuildings adjacent to Hangar 481 building that we observed January of 2011 clearly were buildings that contained significant types of industrial and mechanical machinery and equipment for the use

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and utilizing to maintain airplanes.

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Ιt is our belief that the Ross Aviation that had a very good flight record would most likely have used the best techniques available for the maintenance of the aircraft that were doing those important functions of piloting important people and flying hazardous materials, and most likely thoriated rods, welding rods, which provide a better result and a stronger result would have been implemented, if and when necessary.

The petitioner and I cannot and do not have information that such rods were used, but the existence of the potential for their use and the awareness that they were used are factors that make us question then the mere assertion that that never happened in the building.

One of the things we wanted to find out was, well, what is the basis for OST's statement that thoriated rods were never stored or used at the hangar building. The

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petitioner's wife was working in the office that handled the maintenance -- or the parts and so forth, and as I recall from viewing the building, the place where things would be stored was actually a room right behind where she worked.

If thorium based rods were there, those radioactive materials, even though we don't know how much would have been provided by that, would have then been present in the place where, already stated, as no ever performed. dosimetry was Nobioassay implemented. program was ever No Ross Aviation facilities were ever monitored for contamination, and no radiation monitoring was ever performed inside the hangar building.

So I think that there is a significant question, if nothing else, based upon the question of the thoriated rods that Dr. Glover asked about and received a terse answer that, no, they never were there and never were used, although we, the petitioner,

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believe that there is more to that, and we believe that we should be having the opportunity to at least see the documents that might back up those type of questions.

So getting to Slide 17. Based on the number of claims generated by former Hangar 481 workers and the acceptance of one such claim, the potential exists that exposures to Ross Aviation employees resulting from services rendered for the DOE at Hangar 481 may have occurred.

Also, if acceptance of this petition at this time is not warranted, further investigation is warranted before any final adverse action should be considered on the Hangar 481 SEC petition.

Summarizing and simplifying, we just needed supporting statements for some of the things OST said. We tried to get those things, but were told that it would be 25,000 documents. It would take an extensive amount of investigation to find. If that is true,

1	then I just don't think that it is right to
2	deny this petition at this point.
3	I would like to say, grant the
4	petition, but I recognize that you may not be
5	able to do that, even though it has been
6	pending now for on to three years.
7	I thank you very much for giving
8	me this opportunity to speak, and I will stand
9	for questions if there are any.
10	CHAIRMAN MELIUS: Thank you, sir.
11	I think we actually will move on to Board
12	deliberations now. Any Board Members have
13	further questions for Sam? If not, do we have
14	any recommendations, action? Wanda, go ahead.
15	MEMBER MUNN: I would like to
16	recommend
17	CHAIRMAN MELIUS: Can you speak
18	into the mic, I think, Wanda?
19	MEMBER MUNN: I recommend the
20	Board accept the NIOSH recommendation with
21	regard to SEC Petition 00139 covering all
22	employees who worked at Hangar 481 at Kirtland

1 Air Force Base from March 1, 1989 through 2 February 29, 1996, be not approved. 3 CHAIRMAN MELIUS: Do Ι have a second for that? I'll take that as a motion. 4 MEMBER ROESSLER: Second. 5 6 CHAIRMAN MELIUS: Second from Gen. Further discussion? Mark? 7 MEMBER GRIFFON: I just wanted to 8 follow up on a couple of the things that were 9 I am looking 10 brought up by the petitioner. through the letter and the attachments, and 11 12 there is one description of a delivery, and 13 the person indicates that they wore TLDs on a regular basis, but when the Sandia people 14 15 would deliver containers of radioactive 16 material, they would be suited and masked with supplied oxygen. 17 That just caught my eye. I don't 18 19 know if you have any information about that kind of thing occurring, Sam, or if NIOSH. 20 am sure you have seen this affidavit. 21 22 DR. GLOVER: Certainly, the issue

about them being badged. People were using the badge data for the people from Hangar 481 to do everybody. We have got no indication that anything that would have been an exposure potential for internal -- they have got official reports saying that there is no possible exposure potential in everything from all of the data we have seen.

That is where that 25,000 pages are. We have thousands and thousands of things for NTS and Sandia that relate to swipe data on these packages as they leave. Nothing — it is like you would send a FedEx package. So I certainly can't say that it never happened, that somebody couldn't have had some kind of a — but I don't see anything in the records that support it.

MEMBER GRIFFON: And the other thing that was brought up in the statement was -- and I am just curious about this one -- that there was one claim that was approved. If you can explain how.

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MR. HINNEFELD: We had to ask DOL about that because we didn't have it, and that claim was paid because that person, in addition to having employment at Hangar 481, had employment at Nevada Test Site during the SEC period and was paid via the Nevada Test Site.

We didn't get the claim, presumably because the claim came in after the Class was added. So in that case, DOL doesn't send those claims to us. They just administer the claim.

## CHAIRMAN MELIUS: Paul?

I have a question MEMBER ZIEMER: I was trying to get a feel for the for Sam. difference between loading something on the flight line versus the pads. Is there any way that that would change -- the dosimetry data would be the same in either case. It is the pads, because they're covered. Right? That the covered The flight area? wouldn't be covered. Is that --

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1	DR. GLOVER: The 481 Hangar itself
2	and the immediate surrounding is the facility.
3	So presumably the hot pads would be outside
4	of that because they are like a mile away.
5	But since the pilots and the people from
6	Hangar 481 would have been present at the hot
7	pad with dosimetry we are not trying to
8	parse the data.
9	MEMBER ZIEMER: It wouldn't change
10	anything?
11	DR. GLOVER: No, sir.
12	MEMBER ZIEMER: Yes. That was my
13	impression.
14	MR. ARMIJO: Can I say something?
15	CHAIRMAN MELIUS: Briefly, please.
16	MR. ARMIJO: I am not aware that
17	the dose information over at the hot pad was
18	applied to the people in the hangar. Maybe it
19	was.
20	CHAIRMAN MELIUS: I believe what
21	he just said was that it is being or would
22	be under dose reconstruction because we don't

have any -- NIOSH doesn't have any way of separating that dose from other doses. So even though it is outside the facility, in essence it is being -- or the officially designated facility, it is being taken into account, so to speak.

MEMBER ZIEMER: And then just to clarify in my mind the points raised by the petitioner on those film badge dates that they were talking about, for example, a September 5th date for someone who terminated August 5th. Well, most film badges run, for example, for a month. So if I had a worker at my facility that terminated August 15th or August 19th, whatever it is, but the badges were August 5th to September 5th, his reading would show up September 5th even though he hadn't been working there. It is that month.

Is that what is going on here or had you looked at those dates, Sam?

DR. GLOVER: I certainly didn't look at that petitioner's particular issues,

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1 but I think they said they were responses from 2 So apparently Department of Labor, Paducah. 3 as is many sites, they would have gotten -they would have queried other places. 4 they got a response back from a facility, even 5 6 though he wouldn't necessarily have been a 7 worker for Hangar 481, they may have gotten dose data. But this isn't Hangar 481 data. 8 MEMBER ZIEMER: So I 9 quess this 10 point -- maybe the petitioner can clarify -was just raised because of questions about the 11 validity of some of the data. 12 Is that -- I 13 got you. ARMIJO: Yes, that is true. 14 MR. 15 If I could say one more thing, I would like, 16 and then I will be quiet. CHAIRMAN MELIUS: Go ahead. 17 18 ARMIJO: Very briefly. 19 dose reconstruction for my client's wife used only the ambient data from Sandia as the basis 20 for the dose reconstruction. To my knowledge, 21 the dose reconstruction that was done did not 22

1 take the data from the hot pads and use it as 2 part of the calculation. 3 Т could be mistaken on that, because I didn't go back and check that before 4 this hearing, but that is my recollection of 5 6 how that dose reconstruction was done. That would be inconsistent with what has been said 7 as far as the use of the data, applying it 8 from a hot pad to the person at the base. 9 10 DR. GLOVER: It has been a long time now for me to recall if we -- the ER was 11 12 after the dose done reconstruction 13 complete, and once you do that, you don't necessarily after finished 14 we are 15 deliberating, then we would review our dose 16 construction methodology and see if it needs to be revisited to previous cases. 17 Until we are done, and we have 18 19 gone through the process, though, we don't -until the process is resolved. 20 Yes, sir. CHAIRMAN MELIUS: further 21 Any Yes, Brad. 22 questions from Board Members?

MEMBER CLAWSON: I am just looking Sam on this, and you have an n/a for neutrons. So they didn't have any capabilities of any neutron exposure?

DR. GLOVER: We didn't see anything where there was a -- There was no neutron measurements conducted. Badges weren't set up for doing neutrons, and the source terms that went through there, Brad, on these planes and for this activities wouldn't have been neutron sources.

MEMBER CLAWSON: The reason I was wondering is because they brought up certain containers, and those containers were actually pit containers for Pantex, and those do have a neutron issue. That is why I was wondering why this isn't -- you know, this isn't being addressed. Is there -- A lot of those came from Sandia and so forth. I am just wondering why -- if there was some reason why this isn't being in consideration.

DR. GLOVER: The transport --

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1	sometimes those are via truck, and this is
2	airplane transportation. So they wouldn't
3	have I know the discussion that you and I
4	had had, and so I know particularly what you
5	are referring to regarding neutrons, but I
6	don't think it is pertinent for this one, for
7	this particular exposure scenario.
8	CHAIRMAN MELIUS: Any other
9	questions? If not, I think we will no
10	further discussion, we will ask for a vote.
11	Ted, you want to call the roll? The motion is
12	to reject the SEC, accept the NIOSH Evaluation
13	Report.
14	MR. KATZ: Dr. Anderson?
15	MEMBER ANDERSON: Yes.
16	MR. KATZ: Ms. Beach?
17	MEMBER BEACH: Yes.
18	MR. KATZ: Mr. Clawson?
19	MEMBER CLAWSON: No.
20	MR. KATZ: Dr. Field?
21	MEMBER FIELD: Yes.
22	MR. KATZ: Mr. Gibson?
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1	MEMBER GIBSON: No.
2	MR. KATZ: Mr. Griffon?
3	MEMBER GRIFFON: Yes.
4	MR. KATZ: I will collect Dr.
5	Lemen's vote. He is absent. Dr. Lockey?
6	MEMBER LOCKEY: Yes.
7	MR. KATZ: Dr. Melius?
8	CHAIRMAN MELIUS: Yes.
9	MR. KATZ: Ms. Munn?
10	MEMBER MUNN: Yes.
11	MR. KATZ: I will collect Dr.
12	Poston's vote. Dr. Richardson?
13	MEMBER RICHARDSON: Yes.
14	MR. KATZ: Dr. Roessler?
15	MEMBER ROESSLER: Yes.
16	MR. KATZ: Mr. Schofield?
17	MEMBER SCHOFIELD: Yes.
18	MR. KATZ: Dr. Ziemer?
19	MEMBER ZIEMER: Yes.
20	MR. KATZ: So the motion passes.
21	Two nays, two absent Members. The rest are
22	yeas.

CHAIRMAN MELIUS: Okay. We will
take a break now. We'll have a letter to
review we can probably do that tomorrow on
this. We will take a break until 4:45, and
then we will reconvene for the Ziemer report.
(Whereupon, the above-entitled
matter went off the record at 4:29 p.m. and
resumed at 4:52 p.m.)
CHAIRMAN MELIUS: If we can
reconvene, and Board Members are here in
attendance, and we will start. We have an
update on activities with Lawrence Berkeley
National Lab and the Stanford Linear
Accelerator, and Paul Ziemer.
MEMBER ZIEMER: I am only doing
the Lawrence Berkeley part of this report, and
then Joe Fitzgerald will follow up with the
SC&A activities on Lawrence Berkeley. Then I
think Joe is also going to cover the SLAC
Program. So let's begin with Lawrence
Berkeley.

just want to tell you who is

working on this Work Group. In addition to me, there is Dr. Richardson and Dr. Lemen are the Board Members. Dr. Hughes from NIOSH is the staff person, and then for SC&A Joe Fitzgerald is the contact person.

I have borrowed from Dr. Hughes several slides which were used in 2010 at the point when we had a petition, SEC petition for this site, and I will just quickly review these for the benefit of both the Board and others who are attending today.

The site goes back to 1931 and, of course, in '41 Dr. Lawrence began his defense contract work, and then we have the Manhattan Engineering District activities beginning in August of 1942, and that is when the covered period starts for this facility.

In 1945 we have the time when migrations to the hill east of the Berkeley campus took pace, so an expansion there. There are numerous buildings on the campus and on what they call the hill that are involved

in the Lawrence Berkeley National Lab program and, of course, as you know, this facility is still operating today.

Some of the highlight operations that are going on. Again, this is primarily a research type facility. There is a lot of accelerators of various types, the cyclotrons, the synchrotron, Van de Graaff generators, Betatron, and the high energy linear accelerator as examples.

A lot of radiochemistry has taken place there, of course, including the important plutonium work that started there; a lot of studies on fundamental particles, high energy physics.

Uranium enrichment research began there with Calutron technology, which eventually was used in Oak Ridge at the Y-12 facility, and radiation operations took place in virtually all of the laboratories that are associated with that facility. So it is pretty widespread throughout that facility in

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terms of buildings.

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We had a petition, Petition 00160, that was recommended by NIOSH, approval recommended by NIOSH in January of 2010, and this Board accepted that recommendation on March 5th of 2010, and the Secretary of Health and Human Services on April 5th of 2010 designated the Class for the period of 1942 to 1961.

The formation of this Class based largely on inability to reconstruct with sufficient internal doses accuracy, although external doses caused some difficulties for the early years as well.

I am not going to read this, but just as a reminder, here is the official definition of the Class that already exists, the SEC Class at Lawrence Berkeley National Lab. Again, I will emphasize the dates. it is August 13, '42, through December 31, 1961, and it is all contractors and subcontractors for the site for that period of time.

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Now what is the Work Group doing?

We met last month and reviewed the findings of SC&A. Their findings were based on primarily an initial Site Profile and, to some extent, on a revision. The official Site Profile now is actually a revision dated May 2010, and Joe Fitzgerald is going to present the summary of the findings in just a moment.

So I am not going to go over them here, but the findings of SC&A were largely based on the initial Site Profile, although SC&A did look at the revision and have adjusted things a little bit, but they are still looking at the revised Site Profile.

The Work Group, which met just a few weeks ago, reviewed the initial responses to the findings that were provided by NIOSH to the -- that is the SC&A matrix, basically. We have looked at the SC&A matrix findings. We have looked at the initial responses by NIOSH but, basically, simply to become aware of

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what the issues were.

Those responses by NIOSH were basically new, both to the Work Group as well as to SC&A at the time of our meeting a few weeks ago. So at our next meeting, which we have planned for mid-September, and that date is based largely on the NIOSH schedule and priorities and when they can look at what SC&A's responses will be. Then we will be following up on the issues in the findings matrix.

So that is where we are as far as the Work Group, just really getting underway, and the focus is on the Site Profile. We do not have an additional petition before us at this time.

So with that, I will let Joe Fitzgerald from SC&A come. Joe is going to summarize. Joe, I am going to try to help pull your thing up here. I've found it, but it is a little slow in responding, but in any event, Joe will delineate the findings in a

little more detail. Again, we haven't resolved these. It is just to inform you briefly of what we are looking at.

MR. FITZGERALD: Thank you. Just picking up on where Paul left off, a couple things on this particular review. This Site Profile review, even though the Site Profile came out in 2007, we were tasked by the Board and actually completed this in 2010. Just as we completed the review, the Evaluation Report came out, and then shortly thereafter a Revised Site Profile came out.

in a way, reviewed we reviewed the Site Profile year's or we snapshots three years ago we reviewed. was a little outdated almost at the time it Nonetheless, when the Work Group came out. met we walked through this and put things in perspective against both the ER and the Site Profile review.

Essentially, what it breaks down to is SC&A's charge is to address the findings

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in terms of the `61 cutoff in terms of what is still relevant, and also to take a hard look - - this has been tasked by the Work Group -- to look at the second revision of the Site Profile to see what, in fact, has changed in terms of the findings.

I am not going to go through these in any real detail, but this is sort of a spectrum of very familiar type issues that we see in some of the Site Profiles, certainly the question of whether the historical operations are covered.

I think, for Berkeley, given the rich history of the accelerators, we felt we could benefit from what was done with Brookhaven Site Profile and some of the others, Argonne Site Profile, where they did go from machine to machine and actually provided a lot of good background information helpful that would be for the reconstructer.

We had an issue on MDAs, which may

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actually be addressed in the revision. We are going to have to take a hard look at that and see whether or not some of the deficiencies might, in fact, have been addressed by the revision that came out in 2010. Very possibly, it has.

about high-fired plutonium and tritides. Certainly, there was some handling of that. That wasn't fully addressed in the original Site Profile. We find in the revision, though, quite a bit of discussion on organic forms of tritium, tritides, and high-fired Pu.

So I am sort of optimistic that most of that issue will go away, but we are going to take a hard look at that. That is one of the tasking's from the Work Group.

The adequacy and completeness of records, that is something that, I think, NIOSH is going to take a look at in terms of just looking at whether or not the adequacy and completeness is there through not only '61

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but beyond '61. I think that is a good thing that will give us that validation.

The selection of energy range. There are a lot of machines, accelerators, at Berkeley that had a whole range of energies, and in terms of one calibrating that against the dose reconstruction of photon exposures, clearly, that needs to be done in order to come up with a representative assessment. In some cases, we were kind of concerned that that wasn't done as fully as it needs to be.

dosimetry, Neutron number Again NTA film was used in the earlier years, a lot of the very familiar issues of whether or not the adjustment factors were, in fact, appropriate for the range of the energy So again, that is something that -neutrons. we will take a hard look at the revision. Revision 2 of the Site Profile certainly has a lot more on neutrons than the first version did.

Shallow dose. Another issue that

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we are going to take a look at. The rest of these issues, I think, are pretty familiar to the Board, medical X-rays and some of the questions on bioassay. Some of these issues went away in terms of the SEC.

I think there was agreement that, prior to '61, the adequacy of the records was questionable, certainly not sufficient for dose reconstruction. So a lot of those issues, I think, are gone.

What we are going to be looking at is the adequacy beyond '61, understanding that breakpoint a little better in terms of the Site Profile. So we will certainly cover that for the Board, and then, of course, occupational and environmental dose and some of the other issues that revolve around that.

Those issues are mostly whether or not the assumptions governing how environmental dose were estimated cover the gamut of what was operated on site. You had such a variety of activities, operations, over

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1	those number of years. Can you envelope those
2	with the assumptions that you are using for
3	things like environmental?
4	I think, again, Dr. Ziemer covered
5	this, but we have actions, certainly, to take
6	a hard look at the revision and come back to
7	the Work Group with our assessment of whether
8	these issues are, in fact, fully addressed by
9	this revision and, if not, what some remaining
10	issues are. I think NIOSH has a number of
11	issues along those lines, too.
12	More specifically, I just listed
13	some of the to dos that we have prior to the
14	next Work Group meeting.
15	Any questions on Berkeley as far
16	as where we are going with SC&A?
17	CHAIRMAN MELIUS: Good.
18	MR. FITZGERALD: In terms of
19	Stanford Linear, this is a little bit of a
20	different site. Instead of a multi-purpose
21	site like Berkeley, Stanford Linear was
22	essentially a single purpose particle

accelerator. So the issues certainly are a little more straightforward, shall I say.

We had -- and again, our review was just completed this past January, January

2011, and I believe there is no Work Group formed for SLAC. So essentially, those standings are as is. Those are the pertinent

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We conducted a review May to August of 2011, and we issued a report just about two or three months ago, actually.

Four primary findings -- the distinction between primary and secondary, primary findings certainly have the potential to have implications for dose reconstruction. So we are saying those are more significant, ones that have to be settled in terms of determining whether or not there is technical deficiencies.

Secondary findings certainly are ways to enhance dose reconstruction, but certainly, we found that the approach was

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sound, and certainly would not impair dose reconstruction. These are improvements that one could make to the process, clarifying assumptions, clarifying the bases for the approach, but not certainly questioning the approach itself.

So on the primary findings, basic findings in terms of neutron dose adjustments. This gets to the calibration factors, the adjustment factors that were used in the neutron dose assessments, and again we found that the correction factors recommended by NIOSH, we felt, not adequately were supported by the information that was in the Site Profile; not to say that they were necessarily wrong, but there was no way we could evaluate the correction factors without having a better and clearer understanding of the bases.

So that is a question of probably more clarification, but this does get to a very fundamental point, because again there

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were neutron exposures based on energy ranges from the accelerator, and those correction factors have a pretty significant bearing on what kind of dose can be calculated.

energy photon calibration. Again, components were handled where there would be, certainly, some extremity exposure involved, and this particular issue wasn't really addressed in the Site Profile. So that is a gap that we think needs to be looked at.

Internal dose from radon and thoron. Almost all the accelerator sites, the issue of potential radon or thoron issues in the confined spaces of the accelerator tunnels is addressed. From interviews, we found that apparently radon measurements were taken.

This issue is not really addressed in the Site Profile. We think it at least should be touched on as to whether there was any implications for exposure of workers in those tunnels.

The final one, there are some gaps of the data as far as internal in terms radiological hazards. this particular On site, I think a judgment was made by NIOSH -we don't necessarily disagree with it -- that there really wasn't much in the way of internal hazards because of the nature of the operation, but there were some campaigns where certain targets, radiological targets, were used.

So one can't discount that there may have been episodic exposures, and that issue of potential episodic internal uptake is based on handling of targets or the actual -- I won't say destruction of targets, but the impingement of targets by the accelerator beam. Those issues, we felt, ought to at least be addressed and looked at and acknowledged in there.

It may turn out again there wouldn't be any significant source-term that would be involved in the dose reconstruction

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process, but for Site Profile it would be 1 2 useful to at least have that addressed. 3 So those the four primary are 4 findings. Again, we had -- I won't go through 5 these, but these were areas in terms 6 characterization, claimant medical records, 7 incomplete bases. These were areas where we felt the Site Profile would benefit from 8 clarification and a little bit more detail as 9 10 to where some of these exposures came from and 11 some of the assumptions were made, what the 12 bases for the assumptions were. 13 Again, in terms of actual responses, we wouldn't expect any response in 14 15 the course of the Work Group discussion, but 16 again for the benefit of improving the Site Profile, these were made in the report. 17 Joe, that next to 18 MEMBER GRIFFON: 19 the last one, on site airborne releases, you 20 mentioned. Right. MR. FITZGERALD: 21 22 MEMBER GRIFFON: What type of on

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site airborne releases?

MR. FITZGERALD: This would be where you would have -- using certain targets, and you would fire the accelerator, and you would get some off-gas, but very minor, and the assumptions for what would be the fence line dose. Some of those issues would be -- it would better to understand where those assumptions came from, and that wasn't very clear in the Site Profile.

Again, I don't think that is going to be any significant impact on dose reconstruction or the contribution of that to the Work Group, but that would be helpful to know that.

CHAIRMAN MELIUS: Stu, you had a few comments, and I actually have a question for you also, but go ahead.

MR. HINNEFELD: I don't have a lot of substance to add except that in the Lawrence Berkeley case, things are a little farther along. We have identified the actions

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we need to take to address the issues that are 1 2 in our lap, and so some involve site research. 3 So that is part of the scheduling. With Stanford, we are not quite to 4 that point where we form the plans, but we are 5 6 essentially thinking about it. We have a 7 point of contact on our side and a point of contact has been selected on our contractor's 8 side, and they are formulating what needs to 9 10 be investigated, but it is not quite as far 11 along. I think there is also not a Work 12 13 Group yet for Stanford. 14 CHAIRMAN MELIUS: That was my 15 question for you, was actually if we have some 16 idea of the schedule on responding, we will form a Work Group. 17 Well, 18 MR. HINNEFELD: 19 speaking off the cuff, I would say it would be 20 no better than Berkeley. So you are looking at -- what did you say, a September meeting, 21 22 for Berkeley. I would suggest that Stanford

1	would be no sooner than that.
2	It may not involve as much work.
3	So it might be about the same, but I wouldn't
4	think it would be any sooner.
5	CHAIRMAN MELIUS: Okay, that is
6	fair. That will help. I think we will form a
7	Work Group then and have that ready and be
8	able to meet sometime, hopefully, later in the
9	fall or early winter. Good.
10	Thanks. Any questions from
11	others? Okay.
12	We are now ready for our public
13	comment period. Ted.
14	MR. KATZ: Yes. Just to explain
15	for public commenters the ground rules for
16	these. These Board meetings are all fully
17	transcribed verbatim. So whatever comments
18	you make will be transcribed and posted in the
19	transcript of the Board meeting for all of the
20	public to read on the NIOSH website.
21	So anything you say that is of a
22	private matter, about yourself included, will

1 be posted and available for public 2 consumption. 3 The exception is whatever you 4 might discuss about a third party, about 5 someone else that is private, including their 6 identity, will be redacted from the transcript 7 that gets posted, so to protect their privacy. So you might be a close friend, whoever. 8 That information will be redacted. 9 10 You can have full details about this redaction policy on the NIOSH website 11 under the Board section of the website. 12 13 to the top there, there is a full explanation of what we redact and what we don't redact in 14 15 transcripts. 16 That's it. There is no one signed up here for public comments. We do have a 17 18 request from Dr. McKeel to make comments, and 19 that is the only request, I believe, that I 20 have received. CHAIRMAN MELIUS: 21 Okay. 22 Dr. Melius, this is McKEEL:

1 Dan McKeel. 2 CHAIRMAN MELIUS: Go ahead, Dan. 3 DR. McKEEL: All right. I would 4 like to say good afternoon to the Board. 5 speaking as the -- can you hear me okay? CHAIRMAN MELIUS: 6 Yes, we can. 7 DR. McKEEL: Okay. I am speaking co-petitioner for General 8 the as Industries, SEC-105, being handled by the TBD-9 10 6000 Work Group. striking 11 There is some new 12 information that has emerged that I need to 13 share with the Board. The findings I am reporting today emerged from a careful 14 15 scrutiny of the NRC FOIA 2010-0012 material I 16 first brought to the attention of the Board and NIOSH in December 2010. 17 NRC later posted these 1,016 pages 18 19 of AEC cobalt-60 byproduct materials licensing 20 information to GSI on their public website. findings also were verified 21 new 22 supported by re-interviewing a number of GSI

former workers who substantially corroborated the findings I am about to discuss.

Finding Number 1: The betatron exit tunnel doors were not double leaf and lead-shielded during the covered period of 1953-1966, as is stated in the January 2012 betatron White Paper by David Allen.

We have photographic and affidavit proof that the double leaf doors were installed in 1968 after the covered period at GSI had ended. Betatron workers, to a man, had always stated that the tunnel exit doors on both the old and new betatron buildings during 1963-66 were a, quote, "steel, red ribbon roll-up door."

The NIOSH evidence is that in the 30-page January 2012 Allen White Paper, it showed drawings of the new betatron buildings from the GSI cobalt-60 AEC 1968 and '71 license renewal applications. Again 1968 was two years after the covered period had ended.

The text noted the doors were

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"double leaf with lead shielding," and that is a quote. Similar double leaf doors were described and shown in drawings in the ORNL DOE cleanup report for the GSI new betatron building in 1992. According to ORNL at the same time the old betatron tunnel had only a double leaf door with no lead shielding.

The McKeel [Identifying and information redacted] evidence was that there is both old and recent direct confirmation, eyewitness confirmation, that in covered time period the old and betatron tunnel exits were closed off by red, steel roll-up ribbon doors that could not be retrofitted with lead shielding, in their opinion.

[Identifying information redacted] and McKeel photographs and ones from the Department of Energy cleanup in 1992 show the tunnel exit doors have double leaf doors with vertical strips on the lower panel. There is no lead shielding. These doors bear no

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resemblance to the red ribbon roll-up doors described by the workers for the GSI covered period.

In September 2006 Dan McKeel photographed the exact type of red steel roll-up ribbon door that now enclosed the Building 10 entry to the new betatron building break area and rail track tunnel.

AEC documents said the break area tunnel at the entry to Building 10 was bounded by a chain mesh. Workers testified that in 1963-66 the break area entry to Building 10 and the new betatron was wide open, not enclosed at all.

These observations lead to several important conclusions. First, it is incorrect to reconstruct doses for the covered period based on the assumption there was a double leaf, lead shielded door to limit the dose to workers in Building 10 and in the new building new betatron break area. This section of the second Allen White Paper should be retracted,

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and doses redone based on a roll-up unshielded steel door at the end of the two betatron tunnels.

Second, once again NIOSH and SC&A given insufficient weight to worker testimony about the true nature of the betatron doors and shielding in the covered Instead, the paper uses information period. facilities about the betatron from the residual period that has no relevance to the covered period situation.

Finding number two: the January 2012 Allen White Paper also perpetuates the incorrect statement that the nearest building to the betatron building during the covered period was 1,000 feet away. In fact, to the contrary, the old and new betatron buildings were only 300 feet apart.

The outside of the old betatron building contained a sign that McKeel photographed in 2006 which said, quote, "Do not approach this building within 100 feet."

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We hold this sign meant that a significant radiation danger field existed around the old betatron building.

We can assume a similar danger zone also surrounded the new betatron facility. Those 100 foot radius zones would clearly involve persons in Building 6 -- in Building 10, excuse me, in the space between the two betatron buildings.

This was a very busy area that many unbadged workers also used to bypass walking through the foundry. This was a main boulevard. These between-the-building betatron doses have not been modeled or measured accurately by NIOSH, nor have they been recognized or modeled by SC&A.

Finding three: the Building radiography facility at GSI has incorrectly modeled for the period 1953-1962 radium-226 when was being used for nondestructive testing.

This is an SEC issue. The October

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2011 Allen White Paper on GSI portable sources chose an August 1962 drawing of the Building 6 roofless radiography facility. SC&A uses the same drawing in their review.

Packet 5 of 37 of the NRC FOIA 2010-0012 material chose the same drawing, but in which "[Identifying information redacted]" -- and that is in quotes, capital [Identifying information redacted], period, [Identifying information redacted], end quote, has signed the drawings and annotated that the steel plates and second layer of concrete blocks were, quote, "added in June/July 1962."

[Identifying information redacted] name and the date annotation were omitted in both the SC&A review drawing and in the GSI 1962 and subsequent AEC license applications for the .5 curie Co-60 sources.

Scientifically, this is a very troubling omission of key data, because it confirms worker testimony that no such steel plate shielding was in use prior to 1962 when

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the same facility was used with radium-226 sources in the fish pole technique.

The AEC banned radium-226 in the fish pole NDT technique from use in the early 1960s throughout the USA for safety reasons. Workers state that 300 unbadged workers labored near the Building 6 radiography facility, and this differs from the Allen SC&A analysis.

Finding 3 indicates that neither NIOSH nor SC&A thoroughly reviewed the McKeel NRC FOIA 2010-0012 material. Lack of a door in the inner radiography structure before 1962 and walls that were a single concrete block thick had been revealed to NIOSH and SC&A by GSI workers previously, but was ignored in the recent Allen White Papers.

Radium-226 doses in and surrounding the Building 6 radiography facility from 1953 to 1962 of the covered period should be recalculated or modeled by NIOSH and SC&A. The issue is that no actual -

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- that is, real -- radiologic surveys had been made of this radiography facility prior to 1962 when there was less steel and concrete shielding.

Again, the [Identifying information redacted] June/July 1962 annotations prove the changes were applied to an existing facility and further confirm worker testimony to that effect.

Another overall conclusion that applies to the three findings is that GSI license applications to the AEC cannot be trusted without confirmation by readily obtainable worker testimony.

This company, GSI, clearly was self-serving to the detriment of workers. The [Identifying information redacted] June/July 1962 annotations should have been incorporated into the 1962 GSI cobalt-60 license application to the AEC, but apparently someone removed them.

This removal of key data casts

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doubt on the validity of the entire Nuclear Consultants Corporation radiologic survey and input to GSI's 1962 AEC license application. Correct scientific data appears to have been deliberately manipulated, according to the written record.

GSI petitioners, site experts, and former workers and claimants ask that the TBD-6000 Work Group carefully consider these new findings when making a final recommendation on GSI SEC 50 to the full Board.

Finally, we remain concerned about the inordinate amount of time it has taken to revise GSI Appendix BB and for the Work Group to make its initial recommendation on SEC 105. Compare contrast GSI with the and two Brookhaven SECs at this meeting. BNL had multiple particle accelerators, as did GSI, and even had extensive film badge data on all workers, and had a known bioassay monitoring GSI, by contrast, has minimal film program. badge data from one job category on only three

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percent of workers, and zero bioassay data.

The GSI SEC has been considered for three years and four months since the NIOSH Evaluation Report was issued, without the TBD-6000 Work Group taking a formal vote or making a firm recommendation.

There is a huge difference in processing times for both BNL SECs, which is only one to two months, with one being an 83.14 SEC, compared to the GSI SEC time of three-plus years and, for Appendix BB to be revised, four-plus years.

The SEC and Appendix BB revision process at GSI, those two processes have dragged on for far too long to be considered at all reasonable. This lack of timeliness at GSI is decidedly not claimant favorable by anyone's estimate.

We again urge the TBD-6000 Work Group and full Board to approve the GSI SEC-105 at its next Board meeting. If BNL deserves its SECs, then clearly, GSI does,

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1	too.
2	Thank you very much.
3	CHAIRMAN MELIUS: Thank you, Dan.
4	Anybody else on the call wish to make public
5	comments?
6	If not, then the public comment
7	period is adjourned, and the meeting is
8	adjourned for today. See everybody here
9	tomorrow morning.
LO	(Whereupon, the above-entitled
L1	matter went off the record at 5:28 p.m.)