THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
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convenes the

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ADVISORY BOARD ON

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C O N T E N T S

Dec. 12, 2006

TRANSCRIPT LEGEND

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

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

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

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

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P R O C E E D I N G S

(8:30 a.m.)

WELCOME AND OPENING COMMENTS
DR. PAUL ZIEMER, CHAIR

DR. ZIEMER: Good morning, everyone. I'd like to call the session to order. We begin our second day of deliberations for the 42nd meeting of the Advisory Board on Radiation and Worker Health, remind you again to please register your attendance with us in the attendance folder that's in the outer foyer.

Before we go to -- directly to our agenda, we have a couple of kind of housekeeping things to take care of and we'll begin -- some of these are sort of legal issues. We're going to begin with Emily Howell from our legal counsel and Emily will give us some information pertaining to conflict of interest disclosure statements and related matters. Emily.

MS. HOWELL: Yes. I just wanted to let you all know what I just passed out at your seats is a -- is a two-pronged thing. It's a consent to post a conflict of interest disclosure statement on the Board's web site, as well as

the actual contents of what will be in that disclosure statement. The old Board members may remember that you signed one of these about -- a little over a year ago. They've been on the Board's web page. Unfortunately, the newer members of the Board have not had theirs included and when I went through I just went ahead and updated everyone. So hopefully everything that you have in front of you reflects the actual status of your waiver at this time. And if you have any questions about anything, including even your title or biographical information that would be in the disclosure statement, please feel free to make a note of it on that copy to speak to me about it and hopefully we can get that resolved during this meeting so that those can go ahead and be reposted to the web site. But just feel free to grab me during a break or something if you need to discuss -- and I do need you to sign the consent page on the front and also, once we have a version of the disclosure statement that you're comfortable with, to initial that as well.

DR. ZIEMER: Okay. So even if they signed one

before, a year ago, we need to --

MS. HOWELL: Yes, we're going to --

DR. ZIEMER: -- have a new signature.

MS. HOWELL: -- go ahead and -- go ahead and do this on an annual basis.

DR. ZIEMER: Okay. And update all the biographical materials or make corrections if necessary.

MS. HOWELL: Yes, please.

DR. ZIEMER: Thank you very much. Any questions for Emily on this issue?

(No responses)

Okay. Larry, I believe you have an announcement or an item, also.

MR. ELLIOTT: I just wanted to make sure that the Board and the audience were aware that we have public health advisors -- Ms. Sharon Jenkins and Tanya Carson are next door to us in this room behind us here -- and they are providing updates to claimants who have signed up for an appointment to learn more about dose reconstruction, learn more about their particular claim and where it stands in the process. So that's -- this is going to be come custom for us to do this at Board

meetings. We sent out about 700 some-odd letters to the active claimants in the -- in this geographical area, noticing them that this meeting was occurring and if they wanted an appointment they simply had to call back and schedule one and come in and we would provide them information.

DR. ZIEMER: And Larry, if there are claimants here who did not make an appointment but do have questions, what should they do then?

MR. ELLIOTT: They -- they -- I think we have some open time slots that we can take walk-ins, and they should see me or see one of the public health advisors, Sharon Jenkins or Tanya Carson, and sign up.

DR. ZIEMER: Very good. Thank you. And Lew, do you have some opening remarks at this point?

DR. WADE: Well, two very brief ones. As always I thank the Board for its efforts. I would also like to particularly commend the Board for its due diligence as we move forward in this area of SEC petitions and designations. I think this is becoming a very important part of what the Board does and I admire the Board's willingness to -- to study this issue and make

improvements as it goes forward. I think it serves everyone surrounding the program that the Board does this precisely and correctly, and I admire the Board's willingness to -- to undertake that process. Thank you.

OVERARCHING SCIENCE ISSUES UPDATE
DR. BRANT ULSH, NIOSH/OCAS

DR. ZIEMER: Over the past several years the Board has been cognizant of a number of issues that relate, for example, to the determinations of probability of causation insofar as there are risk estimates made using certain standard procedures, risk estimates, for example, that come to us from the National Cancer Institute. There are also related scientific issues that deal with some of the modeling that's used for dose reconstruction. And to give us an update on those -- some of those scientific issues and to get us thinking about how we track -- particularly ones that may be subject to change or are undergoing change as new science becomes available -- we're going to hear from Brant Ulsh today and he will give us what we call an update on overarching science issues.

DR. WADE: While Brant is getting ready, could I ask if Dr. Poston is on the line?

(No response)

Is Dr. Poston on the line?

(No response)

Okay. Thank you.

DR. ZIEMER: Do we have a mike for the podium, or is there a lavaliere mike that could be used? Here comes --

DR. MELIUS: Someone ran off with it last night.

MS. MUNN: Last time I saw it, it was on somebody's jacket.

DR. MELIUS: Yeah, I know. They were looking for it after the meeting last night, though.

(Pause)

DR. ULSH: Can everybody hear me okay? Speak up? Okay. I'm fighting a cold anyway so I didn't want to go without technical assistance. So as Dr. Ziemer mentioned, I'm here to talk to you about overarching science issues, and perhaps the best place to start is to tell you what we mean when we talk about overarching science issues.

These are issues that have come up in a site-specific context, or maybe in the context of a small number of dose reconstructions, and they

have broader implications beyond just the context where they come up -- sometimes across the entire complex, sometimes just to parts of the complex. But these are the kinds of issues that I'm talking about this morning.

And at the Las Vegas Board meeting, the last Board meeting that we had, the Board expressed a desire that we capture these kinds of issues so that none of them fall through the cracks. And so what we have done in the interim between the Las Vegas meeting and today is just to begin to establish a list of these overarching issues.

And this morning I'm not going to present the NIOSH position on these issues. Rather, we're just at the beginning stages where we capture these issues in one place, and NIOSH will be developing our positions on these issues and presenting them to the Board for their consideration. We anticipate that on most, if not all, of these issues we will issue a position paper, a White Paper, for the Board's consideration. And also this morning we would like to solicit input from the Advisory Board to get your thoughts on -- well, anything

related to overarching issues, but in particular the issues that you think are perhaps more important than -- than others, or even issues not currently on the list that you would like to see added.

So with that introduction, let me see -- ah, all right. Here is the list of issues that I'm going to be talking about today. I won't read through them because I'm going to cover them each individually.

And the first of those issues is hot particles. And what we're talking about here is particles of radioactive material that are very active in terms of the amount of radioactivity they emit, and the prob-- or the issue here is handling these hot particles in terms of when they deposit on the skin or when they're inhaled or ingested. Typically when we do internal dosimetry calculations we calculate dose to an entire organ. And the issue with these hot particles is that the way that they deposit dose in a particular organ can be very uneven. In other words, parts of the organ in the immediate vicinity of the hot particle get much higher dose, but the organ as a whole doesn't

get a high dose. And the same kind of an argument occurs when hot particles deposit on the skin and you're talking about external irradiation.

So this is a topic that we recognize has some fairly important implications. It's not a topic that's new to the health physics community. There's a lot of information on this in the health physics literature, and the NIOSH evaluation is going to look at that literature and come up with a position for how we handle this in terms of a dose reconstruction.

The next topic is the assumptions that we make for unmonitored workers. I think there's probably a lot of confusion out there about what NIOSH does in situations like this, and a lot of that is because our position has evolved over time throughout our discussions with various working groups of the Board and with SC&A in terms of particular SEC petition evaluations and TBD evaluations. There's been a lot of technical interchange between the groups that I've just mentioned, and our position has evolved over time.

So we felt that it would be appropriate to come to the Board with a coherent statement of our position, when we might apply environmental dose versus some percentile of measured coworker doses, and just to let you know the basis for NIOSH's position on this. So that is one topic that I think is probably of great interest, and we will be speaking to you about that as we develop our position.

The next topic is manipulation of dosimetry badges. And what I mean when I say this is we've heard accounts from workers from a variety of sites now -- Rocky Flats, NTS -- that for various reasons they didn't wear their badges when they went into radiation areas. And we would -- we're going to focus -- our evaluation of this issue is going to focus only on the technical aspects of this issue in terms of how we recognize when this might have occurred and how will we account for it in dose reconstructions. As I mentioned, I have talked about this issue in a -- in a site-specific context when I presented the Rocky Flats evaluation report presentation in April in Denver. But we need to take a step back and

talk about this in a more generic format, how it might apply across other sites in the complex as well because we have heard those accounts from workers at a number of site. Okay, this is one that I talked about in Las Ve-- well, two that I talked about in Las Vegas, oro-nasal breathing and ingestion. We are currently -- we have contracts with EG&G to develop some research on these issues. I gave you that schedule in Las Vegas. We are on schedule -- as far as I know, anyway. We anticipate having a report from EG&G on these two issues by the end of the year, so this might be one that we could present to the Board fairly soon, I would think. This was a -- these two topics came up in terms of the Bethlehem Steel TBD evaluation. And although we came to a temporary -- I don't -- I don't want to say temporary, but a limited agreement on how to deal with that issue in those contexts, again, we need to take a step back and talk about this in a more generic format. The next topic is cohort badging. And what we're talking about here in terms of cohort badging is the idea that when a group of

workers are doing the same kind of a job, maybe only one worker, or maybe a subset of those workers, is monitored for radiation exposure and that dose is applied to the group as a whole. I think there's been a lot of perceptions developed about this practice, and I think it's appropriate for NIOSH to come up with our position and present it to you. We need to talk about where and when it might have occurred. And we also need to talk about, in those situations where it did occur, what effect that might have in terms of how we apply coworker data. So I know this is a topic of pretty great interest, so we're going to be developing a White Paper on this issue as well. Okay. The next topic is tracking materials throughout the complex. And if anyone has a shorter, snappier way to say this, I would appreciate it because this is kind of cumbersome. But this is an issue that was raised by Mr. Clawson on the Advisory Board during a working group meeting, and the poster child example of this is radioactive lanthanum that was used at the Los Alamos site and it was the basis for a recent SEC recommendation.

Well, Mr. Clawson discovered that the radioactive lanthanum that was used at Los Alamos was actually produced at Idaho. And so the obvious question is, if radioactive lanthanum was the basis of an SEC petition at Los Alamos and it was produced in Idaho, what effect -- what implications might that have for the Idaho site. And this is just one particular example.

I think this is an important issue, not just for radioactive lanthanum but for other issues as well. It's important that when we make a recommendation to establish an SEC class, we consider what implications that might have at other sites. As most of you know, the Department of Energy atomic -- nuclear weapons complex did not consist of isl-- sites that were islands that didn't have any connection to other sites. There were a lot of connections between sites. Materials were produced at one site, perhaps processed at another site and used at a third site. So I think it's important for us to consider the implications not only at the particular sites where we recognize an issue, but we ask ourselves where

else this might have implications for, so that's what this issue is.

And the next topic is consideration of incidents. Now when I'm talking about incidents -- I guess part of our analysis is going to be coming up with a definition of what we mean when we say incidents. But for me, at least right now, what this means is -- it could be anything from an individual worker has a small spill of radioactive material, that's one end of the spectrum. The other end of the spectrum might be criticality accidents that occurred in Oak Ridge or major fires that destroyed entire buildings at -- at Rocky Flats, for instance. So what we want to do -- oh, this topic came up in the context of the Hanford working group meeting about a week, week and a half ago. And during that conversation it was recognized or discussed that this is particularly important in dose reconstructions that are best estimates.

And for -- just for the public who may not understand what I mean when I say this, these are dose reconstructions that are not overestimates, that are not underestimates, but

the probability of causation is fairly close to 50 percent. And so when we have dose reconstructions like that, we really sharpen the pencil and try to come up with a precise estimate of dose reconstruction -- of the dose, and we refer to these as best-estimate cases. And these are the cases where particular incidents could have an impact on the compensability of the claim, so it's particularly important in -- in those kinds of situations. And we want to ensure that when we're developing Technical Basis Documents, site profiles, or considering SEC petitions, that we capture the resources that are available to summarize these incidents. The example that was discussed in the Hanford working group meeting was the database that exists capturing incidents at the Savannah River Site. And so this should really just be a routine matter of course for us that we look for those kinds of resources whenever we begin developing a site profile. So this is one of the issues that we've added to the overarching issues list.

Okay. Finally, and briefly, I just wanted to

give you a status of where we are with CLL. That's Chronic Lymphocytic Leukemia. This is a topic of interest. It's been going on for some time now. We asked our con-- our technical contractor, SENES, to develop a prototype risk model -- I guess maybe I should back up and give you a little more background on CLL.

CLL is the one type of cancer that is specifically excluded from coverage under Part B of EEOICPA. In other words, it's not a qualifying cancer. We don't do dose reconstructions for people with CLL.

Well, some questions came up about that exclusion. NIOSH has looked at the scientific literature on this issue, and then we asked SENES to develop this risk model and they have developed this prototype risk model and delivered it to us. The next step is going to be that we will solicit outside expert opinion on this risk model. Once that process is complete, we will package the risk model, along with our recommendation to the -- we'll put that together in a decision package that will be sent to the Secretary of Health and Human Services for his decision on that issue.

And I believe that takes me to the end -- yes, so I'd be happy to entertain any questions or comments.

DR. ZIEMER: Very good, Brant. Let me begin the questions by noting that in the case of oro-nasal breathing and also in the case of CLL, you have contracted that work out to specific groups. Is it your plan that most or all of these would be contracted out to sort of expert groups as a first step in gathering and interpreting the information before your staff works on it, or --

DR. ULSH: Well --

DR. ZIEMER: -- will it be a mixed approach?

DR. ULSH: Let me take a crack at that and I'll -- I'll look at Larry to make sure that I'm saying the right thing. I think that decision is going to be impacted by a lot of factors -- resource loading within NIOSH, what expertise that we have in-house. Certainly we will look for opportunities for discrete topics that can be contracted to these expert groups like SENES or to EG&G where it's a discrete bite of a topic and they can develop a very discrete product and hand it to us for review. But even

those that we do put out for contract, once they're delivered to NIOSH it undergoes internal NIOSH review and so -- I mean it's not just that we take whatever a contractor -- subcontractors say, you know, at face value.

DR. ZIEMER: Let me follow that up with one other question then. In a case like CLL where you have SENES working on the report, let us assume that they make a recommendation that some risk factor be applied to CLL and that it be considered. Would -- would you anticipate that before that was recommended for NIOSH to adopt, that you would have National Cancer Institute look at that and sort of get their buy-in? Because it seems to me in that kind of a case that if it was at odds with what an agency like NCI was recommending, we would have a -- a problem. I think I would have a problem.

MR. ELLIOTT: Certainly as we, in the early days of the program, started looking for precedent risk models, we talked with NCI, we -- the law directed us to actually use the early radioepi tables. And in this situation with CLL we certainly would avail ourselves of their

expertise. I imagine that would happen at the point where it goes to the Secretary and the Secretary makes sure that the other agency within the Department has an opportunity to comment. But we have -- we have collegial contacts that Brant and Jim Neton and Russ Henshaw and others on the OCAS staff make with the National Cancer Institute folks, so -- I would add that, you know, this will require rule-making because it would change our rule, so the Secretary's package would be essentially a decision to proceed with rule-making -- a change to the rule.

DR. ZIEMER: Right. And in any case the other agency would then have an opportunity to comment, so --

MR. ELLIOTT: Yes, at that point.

DR. ZIEMER: Right. Well, there's a number of flags up. Let's go around the table; I didn't see who went up first, but Dr. Roessler, why don't you start.

DR. ROESSLER: On the CLL decision, I don't see in the process that the Board will be brought in for advice or a vote or any -- anything else.

MR. ELLIOTT: Well, if you recall, as -- as part of our rule-making procedures, the Board is included in that. So once we have developed a risk model that NIOSH is comfortable with and the Secretary has signed off on, we would present this to the Board as part of the gathering of public comment. You'd be incorporated in that process.

DR. ROESSLER: I think that should be on the slide next time.

DR. ZIEMER: Okay. Michael?

MR. GIBSON: Brant, I believe you mentioned that EG&G's been contracted to do the study on the oral nasal breathing?

DR. ULSH: Yes.

MR. GIBSON: They've been a government-operated contractor for several DOE sites. Are any of the same people that perhaps worked in the health physics departments at those sites doing this study? And if not (sic), isn't that a conflict?

DR. ULSH: Larry, do you want to...

MR. ELLIOTT: You're certainly correct that EG&G has been a principal contractor, MEO contractor, at many of the sites. The people

that we have engaged through the EG&G contract are following the conflict of interest policy that NIOSH has -- is currently implementing. Their disclosures will be posted on the EG&G web site, a link from our web site to theirs. It's -- to my knowledge, the individuals that have been brought to bear on this particular task are not conflicted, they have not served in any other site. These are -- these are research scientists that have been engaged in the contract that we have with them, so...

DR. ZIEMER: Thank you.

MR. GIBSON: So --

DR. ZIEMER: You have a --

MR. GIBSON: -- doesn't that kind of --

DR. ZIEMER: -- follow-up on that?

MR. GIBSON: I mean it's -- kind of sounds like the same thing with ORAU, that -- you know, I hear a lot of them say there's no personal conflict, and yet there could be corporate conflict. Can you explain the difference there?

MR. ELLIOTT: Well, I would say that EG&G perhaps has a corporate conflict at -- at sites where they have had, you know, a responsibility

to manage a given DOE facility. As I said, these individuals that -- that have been brought to bear on this particular task did not serve at -- my understanding, they did not serve in any capacity -- professional capacity at one of those sites that puts them individually as -- in a conflict. So the corporate conflict comes to bear where they're working on something that's relative to a given site document. And in this case, this is an overarching or general issue, so I think we're going to have to look at that closely and sort that out. Again, these are products that are being developed by these contractors, but at the end of the day they will be a NIOSH product, they'll be a NIOSH document, so we'll -- we'll put our seal of approval on them and they will be essentially developed by ourselves. These are the starting points that we're asking EG&G to deliver to us.

DR. ULSH: And Mike, I understand your question. If you look at the alternative, though, and that's to have NIOSH do all of these in-house -- for instance, I might do oro-nasal breathing or ingestion -- I have a

conflict at the Fernald site, so I'm not a completely conflict-free individual. But what that means in terms of how we do our business is that I don't do anything related to the Fernald site. In terms of these overarching issues, I could do that. I could work on those types of issues. So the same -- I think the same kind of standards are going to be applied for the contractor that we hired to do this.

DR. ZIEMER: Okay. Dr. Melius.

DR. MELIUS: Yeah, I -- just to follow up. I mean I think -- I think this needs scrutiny. I mean we've talked about this and the issue of where we had particular issues that affect multiple sites and just -- but mainly focus on a few and there's certainly the potential for a conflict of interest there and I -- I would just urge that you look at it very -- very closely. I'm not saying particularly on this issue, but in these issues in general that there certainly is the potential for the appearance of conflict of interest and I would hope you pay very careful attention to it.

On CLL, just to -- in terms of follow-up, I'm a little confused. We've discussed this before.

We've discussed other scientific issues and I'll get to that in a second, but this -- my recollection is that the process on these issues -- the original process was that NIOSH would work on these issues and then come to the Board for advice. And suddenly we now have the Secretary in between and we're -- we're -- we're -- we're suddenly relegated to another group that provides public comment, and I don't quite understand why that's the -- the case in this particular instance and why this change has taken -- taken place.

DR. ZIEMER: I believe that's probably only true for the CLL case where there's a -- some specific things in the regulation that excludes CLL so it has to go through the rule-making. In any event, I don't think that's true of anything else here that I see. Is that correct?

DR. MELIUS: Well, the -- depends on the nature of the changes that would take place on these other issues, also. If you recall, there's a provision that some issues need to be vetted publicly before they're -- and through the Board before they're -- though not -- they're

not necessarily rule-making issues. So I guess I'm trying to understand is this somehow now presumed that there will be a rule-making change here? I mean it -- to me, one of the outcomes of their report and so forth could be that no change needs to take place, so I'm just puzzled by the change in procedure. And I have some other questions after that.

DR. ZIEMER: Well, and maybe to address it in a slightly different way, take another one of these such as assumptions for unmonitored workers, what would be the path that would be followed as you develop a position and so on?

MR. ELLIOTT: In that example, assumptions for unmonitored workers, the White Paper, we'd present it to the Board, you know, in one of your meetings and we'll seek your input and your advice, your recommendations about that. Conversely, though, where we're talking about a -- a risk model that would be used for CLL, that goes to a rule change. Our -- our current rule excludes Chronic Lymphocytic Leukemia. And I'd look to General Counsel to help out on this, but my understanding is because it's a rule-making effort, if we come forward with a

risk model on CLL, the Secretary -- the Office of Secretary has to be satisfied that it's a -- good science, it's appropriate for us to do this and to modify the rule to include CLL. At that point then we would come before the Board and present the risk model and -- and it would be that -- that would be the opening public venue for discussing this. To do so beforehand is -- it's my understanding it's ex parte communications and we can't bring it to the Board before the Secretary's Office has signed off on it.

DR. ZIEMER: Did you have a follow-up on that?

DR. MELIUS: I have lots of follow-up questions -- several, anyway.

DR. ZIEMER: Go ahead.

DR. MELIUS: The -- I believe that we at one point -- I'm a little puzzled by calling these overarching science issues. I -- if you remember back many years ago we had a list of -- I don't remember what we called them, but they were scientif-- I think they were just plain scientific issues, and a number of those we haven't heard about for quite some time. I believe CLL was actually one of those --

UNIDENTIFIED: CLL was one of those.
DR. MELIUS: -- one of those original issues, but there are other issues related to smoking, adjustments for smoking, potential for adjustments for age at first exposure and -- and so forth, and those seem to have gone by -- by the wayside. And I guess I'm particularly disturbed that we're now calling these overarching scientific issues and seem to have forgotten about those others, and particularly as NIOSH is a scientific agency, one would have hoped we -- to have seen some progress, particularly in things like age at first exposure where there's a significant amount of recent scientific information that would be helpful for dealing with that. And I guess I'm -- my question to Larry or Brant is what's happened to those -- those other issues?
DR. ULSH: When I put this list together, Dr. Melius, I was primarily trying to capture -- and perhaps the name of -- that I put on this presentation was a bit misleading. I was primarily trying to capture issues that have come up in a limited context -- for instance, a dose reconstruction or at a particular site --

that have implications beyond the particular context in which it came up.

You know, certainly we have not forgotten about those other scientific issues, and really I would put CLL in the category of those other scientific issues. The ones that you mentioned, the age at exposure, that is certainly still of interest to us. The smoking adjustment, we presented on that before. So those other issues -- I understand your concern. Those other issues have definitely not gone away. I just -- we just put those in a separate category of science issues, not things that were raised in a particular context that have more broad implications.

DR. ZIEMER: Larry.

MR. ELLIOTT: This is -- you know, this is a good discussion to have because we don't -- we don't know if we've got the list right, so that's why we're bringing this list to you. Smoking adjustment I think we have attended to. We've addressed that. We presented it a couple or three times to the Board. We've taken a position on it and we have -- we have put in a Program Evaluation Review on smoking

adjustment. So you know, I -- maybe that's not off the list in some people's minds and we need to hear that if that's the case, if we need to satisfy you that we've attended to that satisfactorily.

But certainly age at -- age adjustment is something that should be on the list. We haven't done anything with that. We need to -- we need to have a position paper on that. If there are others, we need to hear about those as well, so not to slight the previous work on the science issues, not to say that that's off the table, these seem to have been, you know, more of concern and we wanted to make sure that we had this list right. We certainly can add to it.

DR. MELIUS: Yeah, I -- my -- my concern would just be as time goes by we sort of lose those other issues and -- I mean one doesn't want this -- the science to become -- at least the program is run, to sort of stagnate in terms of its scientific basis. Yeah, I -- I think the title for this list is -- is misleading. I think most of these are really -- I mean they're -- there are scientific aspects to

them, but they're sort of tech-- technical and procedural issues related to -- to dose reconstruction and I'm not sure how much science can go -- go into some -- some of these 'cause a lot of them are questions of what do you do when you don't have information and how do you appropriately adjust and -- and so forth for that. So --

DR. ZIEMER: Actually it appears to be kind of a mix of science and -- and technical issues. I have another question -- or if Wanda has one, go ahead.

DR. MELIUS: I have just one brief comment is that's re-- regarding the incidents, a little -- little revision to history here. I think we've been talking about incidents long before we had the Hanford workgroup a couple of weeks ago. That's probably the most recent discussion, but I -- I think it's -- it's something we've struggled with in terms of how to track those and, you know, identify those at -- at particular sites. I just would remind you we do also have a --

DR. ZIEMER: (Unintelligible) at Nevada Test Site --

DR. MELIUS: Yeah.

DR. ZIEMER: -- context and some others as well.

DR. MELIUS: Yeah, and we have a workgroup, and I believe you were at least on the phone or at the meeting, Brant, I can't remember, when we met with the workgroup on --

DR. ULSH: Yes, I was.

DR. MELIUS: -- dealing with the less than 250-day, which is really -- focuses on the incident issue, so I would be -- I think we need to be careful we don't get sort of too many groups looking at incidents and so lose track of -- of what's going on.

DR. ZIEMER: Okay. Wanda?

MS. MUNN: Just a couple of comments with respect to incidents. It is surprising how differently that word is interpreted from one site to another, and it would be helpful I think for all of us to try to distinguish some sort of baseline about what does and does not constitute an incident. So far as I know, that has not been done. If it has been done, I'm not aware of it. If we wanted to undertake that, it might be helpful both for this Board

and NIOSH for us to very clearly define the parameters of what does constitute an incident because it does obviously vary very clearly from one group to another and from one site to another.

The other thing is, with respect to the word "overarching," I think that came out of discussion in several of the working groups where the term was utilized to identify issues that affect more than one site and -- they can't be resolved simply by saying "at this site this is the way we're going to look at," for example, oro-nasal breathing. It is something which overarches all of the work that we do and would apply at multiple sites. So the working group probably has to take responsibility -- some of the working groups have to take responsibility if the terminology is at fault there.

DR. ZIEMER: Okay, good point. The word "incident" I think not only is different from site to site, but it has changed in time in the DOE complex in terms of the threshold of what constitutes a, quote, incident -- such as a contamination incident or whatever incident

you're talking about, a spill and so on, and so incident is one of those words that means many things to many people and we would have to define what we mean by it when we address it, but --

DR. MELIUS: Okay, can I respond to -- to both those points? One is I was not arguing that NIOSH should not be doing a White Paper on incidents or whatever, I -- my argument was just -- concern was just that they be coordinated and that we have some immediate needs in dealing with the 250-day issue that I don't think we want to wait however long it'll take to do a White Paper, but we coordinate on how we're approaching that and -- so we don't have several left-hand/right-hand situation with that. And my concern about overarching science issue -- science issues was not the overarching part of it but the science part of it. I think it's a little more focused than that.

DR. ZIEMER: Thanks for clarifying. Brad?

MR. CLAWSON: I also want to talk about this incidents or oops or whatever they want to call it. Part of my problem was in the technical

database they addressed some of these but they did not address the effects that it had. And I have to take my personal experiences with a lot of this. At the sites they call out -- in my site -- that there was no release to the outside public, but it didn't take --

DR. ZIEMER: And therefore it was not an incident.

MR. CLAWSON: Therefore it was not an incident, but it took over a year and a half to decon the facility down to where a person could go in there, plus which increased radiation internal dose, people with a lot of skin contaminations and so forth and this is -- this is what I was trying to address. It seems like to me that the technical database addresses it but does not address it in the detail and when we write these we need to make sure that a lot of these things are taking in consideration. That was my issue.

DR. ZIEMER: Thank you. Brant, I wonder if you know or if maybe other Board members, like Gen Roessler, would know whether the ICRP is looking at the oro-nasal issue at all in terms of up-- updating the lung model?

DR. ROESSLER: I think they are.

DR. ZIEMER: Because if they are doing that, it would be of value to the EG&G group to exchange or at least touch base with those folks -- I forget which committee it is, but that lung model is sort of up-- undergoing updating. And we don't want to end up in a different place than ICRP on that issue, I would guess. So -- and maybe you've already touched base, but if not, we need to make sure that that occurs.

DR. ULSH: Thank you. We'll make sure that we do.

DR. ZIEMER: Jim or Brad, you have a comment to make?

DR. MELIUS: I'm sorry, I'm done for now.

DR. ZIEMER: Dr. Wade?

BOARD TRACKING SYSTEMS DISCUSSION

DR. LEWIS WADE, EXECUTIVE SECRETARY

DR. WADE: Just to stimulate the discussion a bit further, the next item on the agenda this morning was to talk about how the Board wishes to track these issues, and I think Dr. Melius has framed the issue excellently. There are two separate streams here. There are the science issues that have been on the agenda off and on that NIOSH is tracking and reporting to

the Board that -- CLL, smoking, age at first exposure, there's that stream.

And now we have a new stream developing and that is where workgroups see an issue that they feel is bigger than their particular site and they say that that issue needs to be addressed at some point. They basically take it off their agenda and put it somewhere. That forms another list, and that's the bulk of what Brant has listed here.

The question I have for the Board is how do you want to, one, track those issues; and secondly, how do you want to ensure that energy is provided to them? In the discussion of the science issues that Dr. Melius led, it's clear that we need more energy applied to those issues to keep them current, keep the work going. I also worry about the overarching issues falling through the cracks. The workgroup doesn't have them. The only place they're discussed is when the Board gets together. That's usually in a hurried mode, without a lot of -- of time devoted to it. So I think we have these two issues. Whether the solution is common or not, I leave that to you.

But we have the science issues that NIOSH is working; we need more energy and focus I think there. Then we have these overarching issues that are coming from the workgroup that at this point sort of sit in limbo, and they need to be tracked, owned and worked by somebody, and that's the issue I would like to bring to you for discussion and resolution.

DR. ZIEMER: Okay, and you've kind of transitioned us into the Board tracking system --

DR. WADE: Right, we can wait for --

DR. ZIEMER: -- thus avoiding the break which is -- no, it's too soon for a break anyway, but let me start -- I'll start a response to that so we have something to shoot at.

Number one, perhaps we could think about two tracks. One is the -- the two science issues, and I think you've got several in here that are in that category. CLL is one. I would guess hot particles would come into that category, and probably oro-nasal breathing. And I think all three of those may have been on the previous, quote, science list. I'm not -- I know CLL was and I'm pretty sure we've talked

about hot particles before in some context. But in any event, the ones here that are something else, like manipulation of badges or tracking materials through the complex, number one, is maybe a separate list. I'm not sure what we'd call it at this time. Somebody can take up a clever name, but don't call it non-scientific issues, but something other than that. And then I think NIOSH has just told us that they have begun work or are beginning to determine how to address each of these, so what -- as a starter, we need a regular update on progress on that.

The Board will need to determine at some point whether it wishes to have any workgroups involved. Now on one of these issues at least, and that's sort of the incident issue -- quote/unquote -- is at least in part being looked at by the -- the SEC 250-day -- I forget the proper name of that workgroup, but --

DR. MELIUS: Whatever it is, yeah.

DR. ZIEMER: -- it's Dr. Melius's workgroup, so he was rightfully protecting his turf with his questioning, but -- so that -- that's one that sort of has a workgroup also involved in that

on an ongoing basis. And there may be others that you would say, you know, we sort of want to be more actively involved as we proceed forward, and others you may say well, let's see what NIOSH comes up with and -- and then go from there. So I'm not necessarily suggesting these, but trying to stimulate your thinking so that you can see what you'd like to do. Wanda, and then Jim.

MS. MUNN: Because of --

MS. HOMOKI-TITUS: I hate to interrupt, but there are some people on the phone that I don't think have it on mute and we can hear a conversation but we can't hear you. If you could ask people to put their phones on mute, that would be great.

DR. WADE: Could you speak -- could you speak a little bit clearer, Liz, so we can hear you?

MS. HOMOKI-TITUS: I'm sorry, I was just saying we can't hear what you all are talking about 'cause there are a number of people that don't have their phones on mute, so we can hear other conversations but not Dr. Ziemer.

DR. WADE: Okay.

MS. HOMOKI-TITUS: Thanks.

DR. WADE: So two -- two rules now. I would ask everyone on the line to mute their phone. If you're not speaking, then mute your phone out of respect for the other listeners. And I would ask all of us at the table to speak loudly and clearly into the microphone.

DR. ZIEMER: Okay. Thank you. Now, Wanda.

MS. MUNN: With respect to the potential of splitting the concerns we've been discussing into scientific based issues and other issues, the terminology for the other issues might appropriately be site-wide technical issues, if we really do want to make that distinction between the two.

DR. ZIEMER: Okay. Thank you. Jim?

DR. MELIUS: Can't resist -- or multiple site technical issues, not always site-wide, but I -- either one is fine. But --

DR. ZIEMER: That's the idea then.

MS. MUNN: Complex --

DR. ZIEMER: Complex-wide.

MS. MUNN: -- complex.

DR. MELIUS: Okay.

DR. ZIEMER: For now we're calling them complex-wide technical issues.

DR. MELIUS: Issues, yeah.
DR. ZIEMER: Okay. It's nice to agree on something. Okay. Jim.
DR. MELIUS: We have a book -- no. I would point out that there are other issues that are complex-wide that are -- various Technical Information Bulletins, some of which we have under review. I actually think the construction worker TIB that we talked about I believe at the last meeting or meeting before that would -- would sort of fit into this -- this category also. And I would just urge that if we're going to track some of these that we -- we already have SC&A looking at a number of these issues. They're looking at the construction TIB, I believe they're -- they're -- in the procedures list of reviews I believe they're looking at a number of others that would fall into this category that we -- whatever the tracking system is, that we include all of those sort of thing that would fit into this defin-- you know, some definition of complex-wide technical issues 'cause I think it would make it easier to keep track and avoid duplication or actually build on some of the

reviews that we might have done -- done earlier. Some of these I believe come out of -- are taken from actually procedures that are developed for a particular site and then they are -- develop a new procedure, allows them to, you know, generalize that to more than -- than one site, and so it would help us I think if we, you know, recognize that and kept a more comprehensive list. But I would also think that for some of these -- these numer-- issues on this recent list that -- I'm certainly not familiar with them, haven't come up in workgroups I've been involved in. But we might want to try to at least as -- since it's early in the process for NIOSH -- do that -- to just solicit some input from the Board and others on these -- you know, doesn't have to be at the meetings, can be afterwards or something. Maybe if -- particularly if we saw the scope of what's being looked at and then if -- I think if we were tracking them, then we could decide, you know, how to best review them if that's appropriate or do we wait, or do we have SC&A look at -- review the -- review them, you know, what do we think is the best steps to take.

DR. ZIEMER: Thank you. I suspect on the construction worker issue, probably it would make sense to be on this list. It's a complex-wide -- and that's pretty far along. But in any event, would it be reasonable to ask that, for example, as we move forward to future meetings, that we not only have a report on -- I mean just an update, but maybe at each time pick out one of these, maybe one that's pretty far along and -- and describe what's being done, without presenting a final position but perhaps saying here's -- here are the issues we're looking at, here -- something like that. I don't know if we can do that in the framework -- I mean understanding that, for example, on CLL there are certain restraints in terms of the rule-making process that might prevent something that looks like a final report from coming to us. But on some of these -- for example, assumptions for unmonitored workers, maybe we have a presentation that sort of -- what's -- what's your thinking on the approach and maybe solicit some input before the thing is too far down the road. I'm thinking off the top of my head here, but I'm wondering if we

couldn't keep the issue before us by having it a regularly-scheduled part of the session.

MR. ELLIOTT: Certainly I think that would be --

DR. ZIEMER: The two -- the two lists.

MR. ELLIOTT: I think that would be very beneficial to everybody and keep us on track. It'd hold us accountable for speaking about where we're at on these things. I think we need to come forward with a timeline for you all, too, that speaks to where -- you know, where we anticipate --

DR. ZIEMER: On each item.

MR. ELLIOTT: -- on each item where we anticipate something's going to be provided to the Board for your full deliberation. And certainly as we approach that, you know, we can share with you where we're at at a given point in time.

DR. ZIEMER: Right, right.

MR. ELLIOTT: Yes, I think that would be perfect.

DR. WADE: Let me add another thought for the Board to consider on the complex-wide technical issues. The matrix approach has served the

working groups well where all of the issues are together, a time line is kept, progress is tracked, resolution is noted, follow-up to resolution -- I think it might be worth considering a matrix that NIOSH would maintain for complex-wide technical issues and bring that to the Board, or whoever the Board designates, at regular intervals. My fear is that these things are falling through the cracks.

One sort of nuance of this for the construction workers, for example, if a complex-wide technical issue revolves around a Technical Information Bulletin or results in a Technical Information Bulletin, then there's the opportunity for SC&A to review that as part of the procedures. What's happening with some is that they exist outside of that universe and therefore they're nowhere to be reviewed and -- and I don't think that serves us well. So I think we need to capture them, and then the Board can decide whether energy needs to be brought to bear to be -- to review them. But some of them are just out there in -- in limbo now. So I would think a matrix might not be a

bad thing for the Board to consider.

DR. ZIEMER: Okay. And Larry is nodding in apparent agreement with that. Thank you. Wanda Munn?

MS. MUNN: First steps for some of our more simple minds would be an actual list of the items themselves. We --

DR. ZIEMER: Yes, I think it -- I think it's two lists, is what -- the scientific and the complex-wide list.

MS. MUNN: Exactly.

DR. ZIEMER: Yeah.

MS. MUNN: Exactly. What Brant has shown us is, from my perspective, a good start.

DR. ZIEMER: Uh-huh.

MS. MUNN: But if we're going to have -- if we're going to agree on what needs tracking, then first and foremost, lists of that --

DR. ZIEMER: Yeah.

MS. MUNN: -- those items.

DR. ZIEMER: And perhaps at our next meeting those lists can appear with at least a start of the time line.

DR. WADE: Could I even be a bit more aggressive? Is it possible to have lists --

those two lists for the Board to consider tomorrow? I mean we -- I think we know what the issues are. Not time line, but just a list of the items. I don't -- I hate to wait three months.

DR. ZIEMER: Or for the -- or for our phone meeting.

DR. WADE: Okay, I mean I --

MR. ELLIOTT: I'd really like to have -- I'd really like to have Dr. Neton's input into this and I don't know I can get it by tomorrow.

DR. WADE: For the phone meeting then.

MR. ELLIOTT: There's phone, yes. I -- I would like to bring forward the two lists, I'd like to bring forward a time line that speaks specifically to each item on the list, and I'd like to bring forward a shell of a matrix that would be used to track the -- the completion of these individual efforts that are on this lis-- on these two lists, and I think we can certainly have that prepared in advance of your telephone call next, and then bring it up -- I'm a little reluctant to say I can commit to having something for you tomorrow --

DR. WADE: That's fine.

DR. ZIEMER: That's --
MR. ELLIOTT: -- or have a complete list. I've realized here that this list is being viewed as incomplete, and I'd hate to have a second chance and miss the target again.
DR. ZIEMER: No, I -- but -- I understand that the-- these are issues that have arisen in the last few months in the framework of some of the work that's being done and -- and it -- now is a good point to meld that into the previous lists of things and -- and to integrate all that work. So -- and we do have a phone meeting scheduled in January, so that would be an appropriate time to -- to have that material.
Mr. Presley.
MR. PRESLEY: Let me -- let me just say that I think that this is a very good starting list. I don't think you've missed the boat at all, but I do think it's a -- it's a start and I think we can add to it.
DR. ZIEMER: Thank you.
MR. PRESLEY: I appreciate what's been done on it.
DR. ZIEMER: Yeah. Okay. Any further comments

on either specific questions on the issues that were discussed or on the actions for going forward?

(No responses)

I think there's a -- we don't need to take a formal vote. I think there's consensus here that it makes sense to -- to track these things and to keep them before the Board on an ongoing basis, including time lines and progress.

Now we do have a break scheduled. We'll go ahead and take the break, reconvene at 10:00. Remind you again that it's our understanding that Senator Obama will be here at 11:15 this morning, to my knowledge, if he got home from the football game last night. I saw him on TV with a Bear -- Bears hat on and I don't know how much celebrating went on -- I -- I better stop right there. Anyway, Senator Obama's due at 11:15.

(Whereupon, a recess was taken from 9:45 a.m. to 10:09 a.m.)

BOARD ADMINISTRATIVE ISSUES
DR. LEWIS WADE, EXECUTIVE SECRETARY

DR. ZIEMER: I'd like to call the meeting back to order. The next item on our agenda is called Board administrative issues. Now Board

members, let me explain what that means. In the past couple of meetings Board members have raised some concerns about keeping track of their, quote, earnings that they get as being Board members, and also their travel reimbursements. There've been some issues relating to state income tax being withheld by the State of Georgia where CDC is located, and some Board members have encountered difficulties with that. There's also been some questions on the consulting rates and concerns that there's not equity between this Board and a sort of sister Board, the DTRA veterans' board. So we have with us today Elaine Baker, who's the personnel person for --

DR. WADE: No, committee management.

DR. ZIEMER: -- committee management person from CDC. And I think also on the line -- do we have -- is it Janie Oddy?

DR. WADE: Yes, we should have Janie Oddy, a personnel person from CDC on the line. Janie, are you with us? She's calling in as we speak.

DR. ZIEMER: Okay.

DR. WADE: By way of introduction, Elaine Baker is the committee management officer for CDC.

She's an important lady, and she agreed to come and to speak to us and to try and answer your questions, or to assuage your fears.

DR. ZIEMER: Okay. And I understand, Elaine, that you don't necessarily have a formal presentation but are here to answer questions that Board members have. Why don't you begin with that issue of is there -- does this Board get the same -- the same --

MS. MUNN: Compensation.

DR. ZIEMER: -- is it called a consulting rate?

MS. MUNN: Compensation.

DR. ZIEMER: Compensation as the DTRA Board, do you know the answer to that?

MS. BAKER: Okay, I'll give you a little background information. The --

DR. WADE: Closer to the microphone.

MS. BAKER: The General Service Administration has a delegated authority from the President to administer the Federal Advisory Committee Act. In July of 2001 it published a final rule that provided information regarding maximum amounts that may be paid to advisory committee members. Also in that rule it states that an agency head can determine whether or not to pay that

maximum amount. The maximum is level four of the executive schedule, and that equates to about $550 per meeting -- I'm sorry, per day. The Department in 2001, after the publication of the final rule, looked at this issue and looked at all of the optives -- HHS optives. The Secretary made a determination in 2002 that all HHS optives should pay a maximum of $250. CDC, dating back from 1983 to 2000, raised its rate from $100 per day in 1983, in 1988 to about $188 and in 2000 to $250. Now the exceptions to this is if in the legislation it states a specific rate, then that committee will pay its members according to that rate.

DR. ZIEMER: Okay. So I think the answer then is that this is the HHS amount, and this has been in effect for how many decades?

MS. BAKER: Actually 2002.

DR. ZIEMER: Okay.

MS. BAKER: 2002.

DR. ZIEMER: I was being facetious. You know, it appears to be about the 1960 rate --

MR. PRESLEY: Yeah.

DR. ZIEMER: -- but -- okay. I'm editorializing -- since my plumber makes more

than that. Okay?
Okay, Board members, any questions on that issue? So the DTRA board comes under I think the Veterans Administration or one of the wealthier agencies such as Department of Defense or something. I know you'll hate the Chairman making remarks like this --
DR. WADE: No, no.
DR. ZIEMER: -- on the formal record, but I mean what are they going to do, fire me?
DR. WADE: Cut your pay.
DR. ZIEMER: Yeah, cut my pay, right. Okay, Board members, any questions on that?
Now let me -- let me ask about the issue of the state income tax. Who's had problems with that? Several -- at least four Board members have. They find the State of Georgia taking their high level of wages and absconding with it. What -- what do we know about that issue?
MS. BAKER: We'll have to defer to the human resources person that's on the line for that.
DR. ZIEMER: So that would be Janie, did -- Janie, are you on the line?
MS. ODDY: Yes, I am.
DR. ZIEMER: Okay.

DR. WADE: Janie, could we ask you to get as close to the -- your mouthpiece as possible and speak as loudly as you can speak?

MS. ODDY: Yes.

DR. WADE: Okay. The issue before us is the issue of Georgia income tax, and I know it breaks into two issues. There was yesterday and now there's tomorrow. Could you speak to both of those issues?

MS. ODDY: I guess -- are you talking about yester-- tomorrow?

DR. WADE: Well, I'm talking about --

MS. ODDY: Okay, one of the things that -- when you file, you can file exemption for Georgia taxes. The problem is you have to do it every year, so if you don't -- if you do it in one year, come 1 January if you don't file the exemption again, it goes away and reverts back to the Georgia taxes.

DR. WADE: So there are two issues, I think. One is, a Board member needs to file that exemption each year. I assume it's at the start of the calendar year?

MS. ODDY: Yes, each January.

DR. WADE: And then there is the issue if -- if

the State of Georgia is holding people's money from past withholding actions, I would like us to help in any way we can to see those Board members recoup those funds.

MS. ODDY: The only mechanism -- if it's a prior year, if it's not -- if it's in the current year we can ask for our payroll office to -- to refund. But if it's in a year that the books have already been closed, it has to be filed with the State of Georgia.

DR. WADE: Now can we help people make those filings? I know -- I know they need to do it, but can you call a Board member and work with a Board member as to the steps they need to go through to accomplish those filings?

MS. ODDY: No, sir, I can't. Those are -- those are individual State filings with their income tax.

MR. PRESLEY: Ma'am, this is Robert Presley with the Board.

MS. ODDY: Yes.

MR. PRESLEY: You all took taxes out on us, knowing that we did not live and did not work in the state of Georgia. We did not find this out for a couple of years after the fact. We

did not know, number one, that we were being taxed by the State of Georgia; number two, that we even had to go back and file for taxes individually from the State of Georgia. I think that somebody needs to come up -- step up and help us with what we need to do to get our money back 'cause not only have I been taxed for the earnings -- and I will say meager earnings -- also you all turned in the money that I was supposed to be reimbursed from my travel and my per diem, and the State of Georgia has taxed that as earnings. Something's wrong.

MS. ODDY: Well, the first thing is, on travel and per diem, it does not come through the payroll office. That is a -- it comes through the CDC financial management office. On the --

DR. ZIEMER: So that's a different --

MS. ODDY: -- (unintelligible) send you the Georgia tax form to file for the refund for the year, but if it's a current year we can ask (unintelligible) to refund the money. If it's a past year, they will not refund it. It will have to come through filing for your State -- it -- through the State income tax refund.

DR. ZIEMER: Wanda Munn has a question.

MS. MUNN: This is more than a little disconcerting. As Mr. Presley pointed out, it was unknown to many of us, certainly it was unknown to me, for at least two years that there was any withholding being taken for the State of Georgia. When I discovered that there was, I was told that what I should do is go to the web site for my pay and indicate on that web site that I should not have Georgia tax withholding. So I did that, but it didn't change anything. And I asked about it again and was told -- instructed to -- to repeat that performance, which I did. I was even queried by my CPA at tax time as to what this Georgia withholding was on my -- my tax forms, and I told him, and he said -- I -- I then asked -- I'm certain -- I'm -- I'm not certain who I asked, but I did ask someone in our agency here, do I have to file a Georgia tax income tax return or what do I need to do in order to make sure that this significant number of hundreds of dollars that was withheld last year is returned. And the answer was if you've said on your form that you're not a Georgia resident

and it should not be taken out, then it will be taken care of. But I am pleased to say that as of this year -- as of last month, what has been withheld this year has now been paid me.

MS. ODDY: Yes.

MS. MUNN: That -- that's been corrected for me this year. But I am hearing you say that I have no recourse for prior years, even though the instructions that I received apparently were either inadequate or incorrect. I'm stuck, right?

DR. WADE: No, I don't think she's saying there's no recourse. I think she's saying you have to file for the return, that the government can't do it for you, that you have to make the representation to the State of Georgia. What I'd like to do is to have someone call you and walk you through that process --

MS. MUNN: I would --

DR. WADE: -- hold your hand through that process.

MS. MUNN: I would appreciate that.

DR. WADE: Elaine, I don't know if you have something to say.

MS. BAKER: What my team will do is to work with the various divisions, whether it's FMO or human resources, with each person that has an issue, to walk through each item that is of concern and to coordinate it and respond to all of the issues.

MR. PRESLEY: This is Bob Presley again. I have another comment. This past year my taxes showed -- I asked if I was -- had Georgia taxes being taken out and they told me no. Then we did get the tax form that says yeah, you've had 400 and something dollars taken out. I get a notice on my statement from the bank that I got 200 and something dollars from the State of Georgia just the other day -- not the 400 and something dollars that have been paid out. So there's -- there's a tremendous amount of inequity here. Three years ago this came up again. I had to get the Commissioner of Finance and Banking from the State of Tennessee to call the State of Georgia to tell them that I was not a resident. They wouldn't even believe that, and got absolutely no help on that. And it should have been taken care of then.

DR. WADE: I'll look --
MR. PRESLEY: I would appreciate some help.
DR. WADE: I think at a minimum you and I need to commit to calling each Board member who asks now to be called, and to work through their issues with them.
MS. BAKER: We will do that.
DR. WADE: Okay. So who -- I assume Wanda, Robert -- Mike?
MR. GIBSON: (Off microphone) I guess so, I don't know, I (unintelligible).
MR. PRESLEY: I have another comment. I'd like to know if at least every quarter that we could get a statement -- this MyPay business don't work. I think five years ago we asked that quarterly we get a statement about our earnings and what we have been paid for travel and stuff like that so we can keep up with it, and I haven't seen that yet. I mean that's only good business.
MS. ODDY: Sir, I can provide you a statement from the system each quarter, but it will only include your payroll and we will have to get with FMO to prepare a statement for your travel and per diem.

MR. PRESLEY: I would appreciate that.
MS. ODDY: Okay.
MS. MUNN: That would be very helpful.
DR. WADE: So now just so we get this right, there -- Wanda, Robert, Mike and Dr. Lockey, Brad?
MR. CLAWSON: Yes.
DR. WADE: We'll commit to calling those people within two weeks.
MS. BAKER: Yes, we will do that.
MR. GRIFFON: I don't know, I mean I'm (unintelligible).
(Whereupon, multiple Board members spoke simultaneously.)
DR. WADE: Okay, we'll call you -- we'll call each Board member and we'll discuss this issue and we'll work through your individual issues. With regard to the monthly --
DR. ZIEMER: You don't need to call me. Georgia's not figured out how to get my money yet.
DR. WADE: We will give your name to the State of Georgia. But that --
DR. ZIEMER: Well, I think states that -- some -- some of it has to do with reciprocity

between the states, and some states have agreements with other states. If I'm having Indiana tax withheld, then apparently Georgia doesn't. But they may not have an agreement with Tennessee.

MR. PRESLEY: They (unintelligible) -- they (unintelligible) an agreement with Tennessee.

DR. ZIEMER: Yeah. Then that's probably part of the -- the issue, but I don't have that problem so you don't need to --

DR. WADE: So a call from Elaine and I to every Board member except Paul at this point --

MS. BAKER: Yes.

DR. WADE: -- and then the list of people who would like a quarterly roll-up prepared of earnings and then of travel.

MR. GRIFFON: Why don't you just do that for (unintelligible) --

DR. WADE: Do it -- we'll do that for each Board member.

DR. ZIEMER: Well, now let me point out -- now I don't know -- the MyPay thing works fine for me. I get -- I get the thing every two weeks. I download it, it gives me a statement of year-to-date and current earnings. And so -- and --

do you -- do you have problems with it, Gen?

DR. ROESSLER: I -- I get it -- you know, you can check in any time and find that information. The only problem I have with MyPay is that sometimes pay goes into it very mysteriously, and I have no idea what days it's for, what it's for. Other times I will submit an invoice for certain days, identifying what they're associated with -- whether it's preparation or a workgroup or a Board meeting -- and nothing happens. And this is all very mysterious. It's very difficult for me to line up what I think my pay should be with these mysterious deposits and then the mysterious ones that don't appear.

DR. ZIEMER: Yeah, I think the main issue between MyPay and the prep times that we turn in to CDC through LaShawn is -- is matching them up. I -- I admit that I don't know how to match them up 'cause I can't identify particular --

MS. MUNN: I can't tell which is which.

DR. ZIEMER: Yeah.

DR. WADE: Okay, we'll -- we will call each Board member and talk about these issues

individually.

DR. ZIEMER: Now the travel part, it's understood now that travel is handled separately, a separate group from the -- the compensation group.

MS. BAKER: Yes, but we'll coordinate with all offices.

DR. ZIEMER: I don't know why tax would be taken out of travel. That doesn't make sense. I've found that what -- in -- in those travel voucher amounts, they do appear mysteriously in my bank account and I simply have to go back and match them up with the voucher that I get from LaShawn, and I have been able to match them up, so that's -- that's the way I do it.

DR. WADE: And that's the way I do it, too. But we'll talk to each Board member. Thank you, Elaine, very much for making (unintelligible) --

DR. ZIEMER: Yeah, thank you very much.

DR. WADE: -- and your (unintelligible).

DR. ZIEMER: Any other issues related to administration of your travel and so on, compensation, taxes?

(No responses)

Okay. Thank you very much.

(Pause)

HARSHAW CHEMICAL CO. SEC PETITION

MR. STUART HINNEFELD, NIOSH/OCAS

The next -- we're actually ahead of schedule, and what we'd like to do is to get underway with the Harshaw petition now. We have talked with the petitioner and that petitioner I believe is going to be on the line, although may not wish to speak to the petition. And if necessary, we will interrupt if -- if the Senator arrives during this presentation, we'll simply break at that point and recognize him for purposes of making a statement.

But we'll ask Stu Hinnefeld now if he will begin the presentation on the Harshaw Chemical Company SEC petition.

DR. WADE: I would ask, is the petitioner for Harshaw on the line? The petitioner for Harshaw? I won't identify the petitioner, but is the petitioner on the line?

(No response)

Okay. Stu, you can proceed.

MR. HINNEFELD: Good morning. I'm not sure, Mr. Chairman, if you know -- there seems a little excitement out in the hall. There might

be something going --

DR. WADE: I can't hear you.

MR. HINNEFELD: I know, it's just anti-- you can't hear me?

DR. WADE: I couldn't hear what you just said.

MR. HINNEFELD: I was making a lame joke. I said there's a -- seems to be a little excitement out in the hall, and I don't know if you guys are aware of -- there might be something going on.

DR. ZIEMER: They may have realized that --

MR. GRIFFON: Probably anticipating your presentation.

MR. HINNEFELD: I'm hoping to be interrupted. I'm here today to present the outcome of the evaluation report for the -- NIOSH has completed for the Harshaw Chemical plant. This is a chemical plant in Cleveland. It was one of the early uranium production plants during World War II. When the government had a need for -- decided they wanted to investigate a nuclear weapons program and started producing a lot of uranium, Harshaw Chemical plant in Cleveland was one of the plants they called on to assist in that effort.

This is an 83.14 petition. The Board members of course all know what that is. This is a situation -- for the audience, a situation where NIOSH has determined that we have -- we have determined it's not feasible to perform dose reconstructions with sufficient accuracy for these -- for these cases and therefore we have proceeded -- essentially initiated with the SE-- initiated the SEC process. We found a -- a claim that we could not do. We felt like we didn't have sufficient information to do a -- a dose reconstruction for that claim and -- and then we evaluated similar claims, as well, so the class is not only the one that we can't do, but people who have similar characteristics.

There's a two-pronged test of course that has to be established -- or has to be met when establishing an SEC by -- first of all, by 83.14-- by 83.14 or 83.13. Is it feasible to estimate the level of radiation doses to the individual members of the class with sufficient accuracy; that's one test. And if not, then is there a reasonable likelihood that the radiation exposure may have endangered the

health of the members of the class. So if that is a yes, then there -- the -- then that is the two-- or you've passed the two-pronged test and then you're in a position to proceed forward with the Special Exposure Cohort class.

Harshaw Chemical Company produced significant quantities of several uranium compounds. They started with milled uranium ore and other feed materials that came from other plants that were operating at that time, and the products that they produced included uranium chloride, uranium tetrafluoride, uranium hexafluoride, uranium trioxide, uranium dioxide and uranyl nitrate hexahydrate.

On at least two occasions Harshaw processed some low enriched uranium. Those -- that process seemed to be what we would refer to as a sweetening operation where they would use some fairly low enriched uranium and blend it with natural uranium, and you get a bigger quantity with an enrichment in the middle. So that seemed to be what they were doing. We know of two -- two instances at least when they did that.

The chemical -- the description of how these

products were produced is provided in more detail, or somewhat more detail, in the Special Exposure Cohort petition evaluation report which has been provided previously.
They performed other activities as well. Between 1943 and 1944 they produced a number of what we might call special radiological materials. These were other uranium compounds that are not so commonly produced anymore or for very long in the -- in the uranium -- in the -- in the weapons production cycle. Those compounds are uranyl fluoride, sodium diuranate and uranyl nitrate. (Unintelligible) look, I think that might be uranium nitrate, actually. From February of 1947 until August of 1950 Harshaw also produced in a laboratory bench-type quantities of thorium-234. Thorium-234 is a daughter product of uranium-238, has quite a short half-life -- I believe it's on the order of about a month -- and so would have a high specific activity. You wouldn't need very much ac-- very much mass to have a pretty high activity. But this was essentially a laboratory-scale operation in one -- in that particular area.

The production of most of the compounds that they were producing ended in 1951 or perhaps a little earlier. The production of uranium trioxide continued until August of 1953. The plant was placed on standby, except that they had some final conversion. They had a few feed materials they still wanted to convert because it essentially put it in a more stable -- more stable form than -- than maybe the feeds, or a more broadly usable form than the feed materials that they had in the plant. And then there was some decommissioning work that was done after that for a couple of years, I believe.

The processes that are relevant to the class is just sort of a restatement. The milled uranium ore and other feed -- feed materials from other plants were converted to -- by a series of chemical treatments to the desired products. And I'd just mentioned the products. The chemical treatments are described a little bit in the -- in the evaluation report.

Important to note here that the milled uranium ore will contain the other radioisotopes from the uranium decay chain, not just the uranium

isotopes themselves, and so you'll have a number of non-uranium isotopes with potential for exposure since the uranium ore was -- ore was handled there.

And the production at this plant increased dramatically during World War II because the Manhattan Engineering District had quite a -- quite a demand for uranium during that time, and this was one of the early plants that was providing it.

In terms of the information we have available that potentially could be used for dose reconstruction, the routine uranium bioassay program didn't begin until December of 1949. We have some limited instances of bioassay data available from a few dates earlier, but not -- it wasn't a routine bioassay program. It sort of seemed like a ad hoc kind of sampling routine that doesn't provide very thorough understanding of what was available or what was being done then.

Air monitoring results are available from the period 1948 through '53. These are reported in units of alpha activity per unit of volume, so these are -- will provide information for that

later period, '48 through '53, that may be useful.

Throughout the operation we have no monitoring data available for internal exposure to non-uranium radionuclides. This would be thorium-234, the other radionuclides that may go along with it, maybe down to radium, so we have no internal monitoring data for those items.

We do have some personnel external radiation monitoring data -- you know, film badge type data. And we do have quite a number of direct radiation measurements available from pretty early in the operation. Those kinds of activities would probably be relatively consistent over the course of operation, the kind of dose rates from uranium and uranium products are -- are fairly well established and is fairly standard.

And we do have some documentation concerning the early Harshaw medical monitoring program -- medical program, and it does indicate that workers received pre-employment chest X-rays and annual physicals that included two X-ray shots, a chest X-ray and a pelvic X-ray exam.

Therefore we believe we can adequately

reconstruct the doses that were associated with the medical exposure associated with the work based on other Technical Basis Documents that we've already published and knowledge of that medical program.

So in terms of progress of this petition, we determined that it was unable -- that we could not obtain sufficient information to complete the dose reconstructions for a particular claim, an existing claim -- sometimes called a litmus test claim or a representative claim -- and in June we notified the claimant that we could not reconstruct the dose. And we provided the claimant with a SEC petition Form A, which is the short form that essentially says please sign here and send it back and we'll proceed. The petition was received back by us at the end of July and so we proceeded now with the evaluation report and provide it to the Board.

Our conclusions on our evaluation of the data available is that we found that we lack the monitoring, process and source information sufficient to estimate the internal dose resulting from non-uranium nuclides for the

period August 14th, 1942 through November 30th of 1949.

Now the important thing to remember here is that these non-uranium radionuclides that would have entered with uranium ore would -- first of all, we don't have any particular information about the extent of their content or how -- what their content was, how much activity there was from these non-uranium isotopes compared to uranium at any point. And not only do we not have any information at any point, but it would not be constant. Because of the chemical processes that were used at Harshaw, they -- the extent of equilibrium or disequilibrium would have been distorted a number of times during these chemical processes, and so there will be potential for exposure to materials with -- with a variety of relative activities. You know, meaning relative -- non-uranium activity to uranium activity, so it -- it makes it impossible to tie the non-uranium exposure to say a reported uranium exposure as a -- a fraction or something.

Now we may have sufficient information to estimate the external doses and internal doses

from uranium. We definitely believe we have enough information for medical exposure from this period, from the class -- for all doses -- or from those doses during the period, and we believe we may be able to do all doses from December 1st, 1949 on. I'm being a little equivocal here because there is still -- it still I think remains to be proven that we can do the uranium intakes from this early period. We do have some monitoring data from the early period. We have monitoring data that starts relatively regularly in late 1949. And some people who worked and had monitoring data from '49 on we believe also started working in 1943 and worked throughout. So if you -- for an internal monitoring exposure if you have bioassay data from '49 on, there may be a way to bound an intake that that person received earlier -- you know, years earlier. That may -- it may be feasible. It may turn out that the bound is so high as to be incredible and so it may not work out, so that's why I wanted to be a little equivocal about our ability to do that in terms of the uranium intake.

I think we probably feel a little better about

the external dose from the -- during the class period. We think we have pretty good information and even -- I mean a source term model for uranium for external dose is a relatively good way to do external dose from -- from those materials. And like I said, I believe we can do the medical exposures, as well.

Now from 1949 on we have bioassay data -- relatively regular bioassay data. We have air sampling data that provides total alpha activity. So we believe it may be possible to reconstruct not only uranium intakes but also the non-uranium intakes later, based on those sets of data. I believe that remains to be demonstrated, and so, like I said, I'm being a little equivocal about whether we can actually -- will find out ultimately that we can find out we can do that or not, but we wanted to proceed with the -- with the petition at this point because it provides a remedy for the people in this class. We know we cannot do these particular internal doses up through November 1949, and it allows some cases then to receive their answer now as opposed to pursuing

further research and maybe extending it later on. We may be back at a later date with an additional 83.14 that says that well, we've evaluated and maybe we really can't do this dose and we need to extend these dates later. There is certainly -- we may receive a petition from Harshaw that petitions for later dates, which would then require evaluation and demonstration of that. So -- so but -- for the reason of moving forward with a certain set of claims that we -- we are confident we will not be able to do, we're presenting the petition and the evaluation report at this time.

DR. ZIEMER: Thank you, Stu. Stu, I noticed in the case of Monsanto NIOSH provided a very helpful chart where they broke down what you could and what you couldn't do.

MR. HINNEFELD: Uh-huh.

DR. ZIEMER: If you were to do such a chart for -- for this particular site for -- for Harshaw, I just want to make sure I caught all the pieces.

MR. HINNEFELD: Okay.

DR. ZIEMER: You can do occupational medical --

MR. HINNEFELD: Yes.

DR. ZIEMER: -- for those years.
MR. HINNEFELD: Yes.
DR. ZIEMER: So let's focus on the external. You can do occupational medical.
MR. HINNEFELD: Yes.
DR. ZIEMER: You can do external uranium exposures, or --
MR. HINNEFELD: We believe we can do external exposures pretty much in their entirety.
DR. ZIEMER: Of -- of all types --
MR. HINNEFELD: Yes.
DR. ZIEMER: -- 'cause they have -- okay.
MR. HINNEFELD: Yes.
DR. ZIEMER: So let's say external beta/gamma. What about external neutron -- there was no neutron --
MR. HINNEFELD: Well, there's no neutron monitoring, but we have a precedent for a research of the relative contribution of neutrons to photon dose --
DR. ZIEMER: For the --
MR. HINNEFELD: -- for these types of compounds, for these fluoride compounds.
DR. ZIEMER: So if you were doing such a chart, the external would say dose reconstruction

feasible for beta/gamma --

MR. HINNEFELD: Yes.

DR. ZIEMER: -- for neutron and for medical.

MR. HINNEFELD: Yes.

DR. ZIEMER: For internal, I think you said you may be able to do uranium.

MR. HINNEFELD: I think for uranium we would say --

DR. ZIEMER: Or is it --

MR. HINNEFELD: -- maybe.

DR. ZIEMER: Okay.

MR. HINNEFELD: If we put the chart together, I think we would say maybe.

DR. ZIEMER: That's a new -- new column in the chart.

MR. HINNEFELD: Well, I'm a new kind of presenter.

DR. ZIEMER: Yeah, I understand. But the internal issue really revolves around the other nuclides then, the --

MR. HINNEFELD: Clearly we won't be able to reconstruct the other radionuclides for this class period.

DR. ZIEMER: Okay.

DR. WADE: Stu, I think you have more slides.

MR. HINNEFELD: Yeah.
DR. ZIEMER: Oh, I'm sorry.
MR. HINNEFELD: That's okay.
DR. ZIEMER: Yeah.
DR. MELIUS: Chair's prerogative.
MR. HINNEFELD: So our -- our fin-- our conclusions continue about health endangerment. We've determined that members of the class were not exposed to radiation during a discrete incident likely to have involved levels of exposure similar to a high -- or as high as those during a nuclear criticality accident, so we don't believe that presence necessarily is sufficient for health endangerment. But we do believe that the evidence indicates that there was opportunity for chronic exposures that could certainly endanger the health of members of the class.
The definition of the class is reproduced here. It's also on the petition evaluation report. It's all the Atomic Weapons Employer's employees who were monitored, or should have been monitored, at the site while working at the Harshaw Harvard-Denison Plant located at 1000 Harvard Avenue in Cleveland, Ohio for a

number of days aggregating at least 250 workdays from August the 14th, 1942 when the relationship with AEC began -- or been going with the MED at that point -- through November 30th, 1949, or in combination with work within the parameters established by one or more of the other classes -- SEC classes. So this is the definition.

With respect to who should have -- who were monitored or should have been monitored, there's information about contamination at the plant, contamination exterior to the plant. I think it would be -- I can't really speak definitively about, you know, what -- how will that be interpreted because it's not NIOSH's interpretation to make. I think it would be hard -- it would be hard-pressed, though, to identify people who should have not have been monitored by today's standards at the Harshaw plant, based on descriptions of radiological condition of the plant.

The recommendation of the petition evaluation report is for the period of August 14, 1942 through November 30th, 1949 NIOSH finds that radiation dose estimates cannot be

reconstructed for compensation purposes, so we feel that it's not feasible to reconstruct the doses with sufficient accuracy during that time, and that the health was certainly potentially endangered -- the health of the class -- members of the class was potentially endangered.

So that's the completion there.

DR. ZIEMER: Okay. Now just -- I'm going to reiterate again then. I'm -- for internal, we would say not feasible. For external, for -- you're saying feasible.

MR. HINNEFELD: Yes.

DR. ZIEMER: Across the board, pretty much.

MR. HINNEFELD: Yes.

DR. ZIEMER: Yes.

DR. MELIUS: And some internal, maybe, you said.

UNIDENTIFIED: (Off microphone) Some internal maybe, the uranium (unintelligible).

DR. ZIEMER: Well, yes, I understand that, but basically by -- by the fact that they eliminate the other nuclides for -- you're not going to be able to do internal.

MR. HINNEFELD: We cannot do a complete

internal dose reconstruction --

DR. MELIUS: Partial.

DR. ZIEMER: Internal's going to be a no, not -- not a maybe.

MR. HINNEFELD: There may be certain individual claimants that we have bioassay --

DR. MELIUS: Well, yeah --

DR. ZIEMER: But for the purposes --

MR. HINNEFELD: -- data on sufficient for internal uranium there may be a way --

DR. ZIEMER: -- of this kind of chart, that's the driver.

MR. HINNEFELD: Yeah.

DR. ZIEMER: You can't do internal.

MR. HINNEFELD: Yes.

DR. ZIEMER: For the class.

MR. PRESLEY: How many cases are we talking about?

MR. HINNEFELD: You know, I e-mailed the office for that this morning and asked them to answer by 3:00 o'clock, so I will know later on today. It's not -- I don't think it's a large number of cases 'cause this is, you know, early on at Harshaw.

DR. ZIEMER: Okay. Questions, Board members?

Dr. Melius.

DR. MELIUS: Just to follow up on that question, I'd also be curious about what cases you've done in -- for the later time period. I suppose -- assume there's overlap and I think it's helpful for context to understand what's going on.

MR. ELLIOTT: I don't know that I have the information to get specific to your question, Dr. Melius, but I have general information here about the number of claims. We have -- for Harshaw Chemical we have been given 59 claims from DOL for dose reconstruction. Through our efforts at reconstructing what we could reconstruct, we have completed 31 of those 59, and of those 31, let's see, 25 were found to be compensable and six were found to be non-compensable. So that's -- that's all the data I have right here. Stu's -- Stu's --

DR. ZIEMER: And we don't have the years on those, is --

MR. ELLIOTT: I don't have the years, no.

DR. ZIEMER: Other questions, comments? Yes, Mark.

MR. GRIFFON: Yeah, I'm just curious about the

film badge data. You say you have data for 187 workers for that time period. Is that -- can you put that in context? That's 187 out of -- how many people would have been working there? Was it --

MR. HINNEFELD: Well, standing --

MR. GRIFFON: -- 100 percent badging, was it -- you know, do you know anything more about that?

MR. HINNEFELD: Standing here today, I don't. The -- I -- I'm pretty confident it wouldn't be 100 percent. Harshaw I believe was a relatively good-sized plant, and that doesn't sound like it would have been 100 percent. Now whether the Harshaw plant involved -- you know, surely -- certainly probably would have involved other chemical operations and so maybe the 187 people who worked in Plant C where the work was done, maybe they were monitored. I don't think -- but we don't have a complete record. I mean it's not like some plants where we have pretty much the complete badging record, but we don't have that.

DR. ZIEMER: Well, Harshaw was certainly doing a lot -- lot of other things. I mean they were a major chemical supplier in the United States,

so certainly many more people working there, so this is one -- is this one building that was exclusively used for this work out of a plant, or part of a -- one building, or do we know what the physical -- how much separation would there have been between these workers and others who worked for Harshaw?

MR. HINNEFELD: The description of -- of the plant refers to the uranium work being done in Plant C. Now Plant C, by experience, may be more than one building. And I don't have readily at hand the information about the relative position of this plant relative to other facilities that may be included. The intent here is that this was done at I believe one plant, which may not be one building, at that --

DR. ZIEMER: Right.

MR. HINNEFELD: -- particular address on Harvard Avenue.

DR. ZIEMER: Right.

MR. HINNEFELD: And so --

DR. ZIEMER: So someone who might really not have been involved with this particular work but who was in that building might be able to

make a claim under this --

MR. HINNEFELD: Yes.

DR. ZIEMER: -- description, I believe --

MR. HINNEFELD: Yes.

DR. ZIEMER: -- if they were in that building.

MR. HINNEFELD: Yes, I would think that anyone, unless they were, you know, really specifically excluded from this building, unless there's evidence that there was this population that worked at this address that was excluded from this building, unless there's evidence to that effect, I would think anyone who worked at this address would be included in the class -- that would be my judgment, but mine's not the final judgment.

DR. ZIEMER: Brad.

MR. CLAWSON: Stu, do we have any information on what -- the cleanup or anything of it? I see it goes to '49. What happened -- what happened then, did --

MR. HINNEFELD: In December of 1949 we obtained -- they began a routine bioassay program, and so we have monitoring data that -- that's pretty good from December 1949 on. We also have a routine air monitoring program that

actually started a little earlier than that. That will allow us, we believe, to -- with the appropriate, you know, calculations and caveats, will allow us to bound the internal exposure to non-uranium nuclides. It may turn out that it doesn't. It may turn out it's not as good as we think it is going to turn out, and so it may not work out to that effect. But our belief today is that we're -- you know, we -- it may allow us to do that, so we haven't included that yet.

We also haven't completed that -- the evaluation of that question so that we can move forward with the class that we know we can't do and provide answers to that group of people.

MR. CLAWSON: Okay.

DR. ZIEMER: Thank you. Dr. Melius.

DR. MELIUS: Can I ask what would -- what's sort of the plan timetable and procedure for doing that? I'm presuming that since ORAU prepared -- worked on this report, some of the same people would be involved in go-- going for-- I'm just sort of trying to understand when we have these --

MR. HINNEFELD: Yeah, sure. The routine that's

followed on these -- and it's the same for -- for these 83.14 sites -- is that when an 83.14 class is added, there are a number of other things -- you know, you're not done with the site because there are the non-presumptive cases that have to be done. And so when the 83.14 class becomes effective -- so that will be after the Secretary's letter and then the waiting period. When it becomes effective, then the class -- the cases in the class that have presumptive cancers, we ship those off to the Department of Labor right away and we say we believe these fit the criteria and that we don't need to deal with them anymore.

The non-presumptive cases, which we've typically had pended up until that point, we un-pend and then we attempt -- then we work the dose reconstruction. In order to do that, we have to have essentially a site profile or something like site -- like a site profile that tells the dose reconstructor how to do the dose reconstructions for these non-presumptive cancers so that they're done consistently. So during the interim -- you know, from the time we feel pretty confident that we're going to

have an 83.14 class -- up until the time of its effectiveness, what we're working on is what is our non-presumptive approach; what can we do during non-presumptive -- for the non-presumptive cancers, and publishing that document, maybe not in time, but certainly we want to shoot for that time bec-- and then -- so that we can proceed with the non-presumptive cancers in doing the partial dose reconstructions.

During that development of that -- we still call them site profiles or TBDs. During that development is when these issues will be vetted and we'll be critiquing, you know, the -- the robustness of the data and do we really -- will we really be able to do that. So that is the process that's followed for these. So it will be during the preparation of that site profile for non-presumptives that the issues will be addressed.

DR. MELIUS: A-- and does that include the later time period, also?

MR. HINNEFELD: Ye-- it will include the later time period, as well, yes, because we're trying to -- you're trying to write one to address it

all. And then if it turns out we can't, like I said, we could end up back here.

DR. MELIUS: Yeah. I'm just...

DR. ZIEMER: Thank you. Other comments or questions? Mark.

MR. GRIFFON: I just -- I -- I think this is probably for a later disc-- may be for a later discussion, but the -- you mentioned that for the later time period you have air sampling and therefore you may be able to do the non-uranium exposures. But I -- I think you've very clearly stated, and I was going to raise this as a question but you addressed it, that you don't know necessarily the variation in activities throughout the process. Things are going to concentrate, you're going to have different ratios.

MR. HINNEFELD: Right.

MR. GRIFFON: How is that going to be different in the later time periods when you have -- I'm assuming in '49 it was still probably gross alpha air sampling.

MR. HINNEFELD: Yeah, the --

MR. GRIFFON: How -- how will you all of a sudden know the ratios then to apply for non-

uranium?

MR. HINNEFELD: For -- for a bounding dose estimate, which is what's required, I don't know that you need to know the ratios. You have a -- if the bounding estimate is the most accurate you can do, then that's what we'll do. And for a bounding dose estimate, if you choose the radionuclide that is most advantageous to the claimant -- and it may be different for different claimants, you know, since we don't know what the radionuclide was -- you can choose the dose from the one that's most advantageous. It would be different for different claimants, depending upon where -- where their cancer originated and if any -- any of those particularly radioactive materials -- what -- you know --

MR. GRIFFON: And you have --

MR. HINNEFELD: -- aggregated in that organ. So it may be possible to do a bounding exposure for the non-uranium materials. It may.

MR. GRIFFON: For this earlier time frame you just have no air sampling at all --

MR. HINNEFELD: No, we don't have air sampling data for this period.

MR. GRIFFON: Okay. Okay.

DR. ZIEMER: Stu, could -- just for the sake of argument, could one utilize later air samples as an indication of what earlier concentrations might have been, or do we not know enough about the processes in time to say that what was done later could represent the earlier time period? I mean that -- well, that would be one approach if you were to say well, we can reconstruct dose and here's how we would do it. I mean that -- that's --

MR. HINNEFELD: Well --

DR. ZIEMER: -- what would come to mind as a first step and -- and so -- tell -- tell me why you can't do that.

MR. HINNEFELD: Okay, the -- it -- it may be possible to do that in some situations, but recall the history of these -- these MED plants, the 1942 plants. They operated during the War. They produced this uranium and they needed to produce a bomb, and so there was a certain mindset that we're going to produce a bomb, and health and safety was not terribly well-evaluated. In fact, it wasn't until about 1948 when the Health and Safety Laboratory

started looking at these plants, said, you know, if we're going to keep making uranium and we're going to keep running these plants, we need to find out the conditions and radiological conditions at these plants and do some evaluation. And so once the Health and Safety Laboratory started paying attention to these plants, you know, you can reasonably con- - you should conclude that they made recommendations, 'cause they almost always did, and they felt like, you know, this needs to be done better and they attempted to do it better from a health and safety standpoint. So air sampling data from -- you know, after HASL got involved and saying that is representative of work that was done during World War II, I don't think that's a logical conclusion that you should make.

DR. ZIEMER: Yeah. So I think the argument then is that even though you have air samples later, those are coupled with probably improved practices based on the fact that you now have, in a sense, a regulator looking over your shoulder --

MR. HINNEFELD: We -- we tend to see that.

DR. ZIEMER: -- and -- and therefore you can't make the argument that the practices remained the same -- or the practices were the same later as they were in the earlier case.

MR. HINNEFELD: And we tend to see that when the Health and Safety Laboratory gets involved in these plants, that --

DR. ZIEMER: Sure.

MR. HINNEFELD: -- changes will happen relatively quickly.

DR. ZIEMER: Thank you. Robert.

MR. PRESLEY: Stu, we do not know where the material came from for Harshaw. Is that correct?

MR. HINNEFELD: Oh, I think we know in --

MR. PRESLEY: Do we --

MR. HINNEFELD: -- general. I don't know for sure --

MR. PRESLEY: But we can't --

MR. HINNEFELD: -- where the milled ore came from, for sure.

MR. PRESLEY: That's what I'm saying, the milled ore, you know, if it came from -- if it was Congo milled ore it had a higher content. I think --

MR. HINNEFELD: Oh, you mean like the Belgian Congo K-65 --

MR. PRESLEY: Yeah, yeah.

MR. HINNEFELD: -- what they called K-65 in some places? I -- right, that would have --

MR. PRESLEY: Had a big --

MR. HINNEFELD: -- significantly higher -- I don't -- I don't know. We may, but --

MR. PRESLEY: And that's --

MR. HINNEFELD: -- I don't know standing here.

MR. PRESLEY: Because, you know, if it -- if it did come from there, it would have a significantly higher amount of air parti-- in the air particles.

MR. HINNEFELD: Yeah, particularly radium. I mean the --

MR. PRESLEY: Right.

MR. HINNEFELD: -- Belgian Congo ore was really -- really nice ore.

DR. ZIEMER: Okay.

MR. HINNEFELD: Sorry I'm not more long-winded.

DR. ZIEMER: Any more comments? Okay --

MR. GRIFFON: Just -- just one more --

DR. ZIEMER: Oh, Mark, okay.

MR. GRIFFON: -- thing on external, I -- 187

workers, and I wasn't talking out of the whole plant site, but you don't have any indication whether that was -- whether they had a practice of monitoring all workers in that Plant C area or --

MR. HINNEFELD: Well, standing here, I don't know. I think our -- our information --

MR. GRIFFON: Most likely it wasn't --

MR. HINNEFELD: -- about that early -- early film badge data is -- is not real robust. I don't think we have a lot. I mean it's not like we have 187 people who were monitored from 1940 through 1948, you know, that we can see that, you know, certain -- you know, it was the same population monitored over time. I believe, if I'm not mistaken, it's a -- it's a very limited time frame that we have the monitoring data for, and it just happened to be 187 people on that report which --

MR. GRIFFON: But does it cover all four years equal-- or -- or -- I mean --

MR. HINNEFELD: No, I don't believe it covers all four year equally.

MR. GRIFFON: Do we have any sense of -- do we have that data anywhere that we can look at it

kind of and say how many workers were monitored --

DR. ZIEMER: LaVon, do you --

MR. HINNEFELD: I'm looking to LaVon Rutherford, who's a little more familiar with the information about the site than I am.

MR. RUTHERFORD: Do we actually have air -- we have film badge monitoring data starting as early as 1943 and 1944, but it's sparse amount of da-- I mean it's small numbers because they were not monitoring everyone during that time when they first started. And then as -- as the activity is increased and as they moved on further, the number of people monitored increased.

MR. GRIFFON: And -- and the basis for the badging?

MR. RUTHERFORD: Well, the --

MR. GRIFFON: Do you know anything --

MR. RUTHERFORD: -- the higher --

MR. GRIFFON: -- about the badging practices?

MR. RUTHERFORD: -- exposed people, they were looking for --

MR. GRIFFON: Higher exposed --

MR. RUTHERFORD: That's basically what we've

seen, anyway. It looks like the higher exposed people were monitored.

MR. GRIFFON: But you -- and you think you have enough information about --

MR. RUTHERFORD: Well --

MR. GRIFFON: -- who was monitored that you can at least bound the external dose for all workers in the class?

MR. RUTHERFORD: Yes.

MR. GRIFFON: Is that the idea?

MR. RUTHERFORD: Yes. Between that information we have there, information we have from other sites that were similar activities, you know, with the information between that -- all of those sources, I think we have enough to do -- to bound the external exposure.

DR. ZIEMER: Good. Okay. Robert, did you have another question or --

MR. PRESLEY: I'm sorry.

DR. ZIEMER: Okay. Now on this -- on this particular one, we have the opportunity to make a -- a motion in terms of both the SEC and if -- if we are supportive of the recommendation from NIOSH to have appropriate wording, I think, on the -- the potential for dose

reconstruction of certain cases that --

DR. MELIUS: I think we need to get some specific wording on Monsanto to get some feedback from --

DR. ZIEMER: Right, and --

DR. MELIUS: -- Board members about the Monsanto and --

DR. ZIEMER: Indeed we can do what we did yesterday --

DR. MELIUS: Yeah, just sort of two-step and so --

DR. ZIEMER: -- and -- and have a generic motion, and if it -- if it passes, then we can ask that the specific wording be developed in a manner similar to what we did yesterday. And the -- the hope would be that by tomorrow we would have a -- a group of actions that we could look at the specific words.

So the Chair would entertain a motion -- pro or con, as the group desires -- or -- okay, Wanda Munn.

MS. MUNN: I move that we accept the recommendation to declare a Special Exposure Cohort for the years established in this petition and for the individuals established in

the petition.

DR. ZIEMER: Okay. The motion would be to recommend to the Secretary approval of this Special Exposure Cohort as described, and the exact wording of the motion to be confirmed later in the meeting.

MS. MUNN: Correct.

MR. PRESLEY: Second.

DR. ZIEMER: And seconded by Mr. Presley. Now is there any discussion on this motion?

(No responses)

The understanding then is if the motion passes we will return to it later in the meeting to make sure that we agree on the exact words which will define the class and any related items.

All in favor, raise your right hand.

(Affirmative responses)

And it appears to be unanimous. Any opposed?

(No responses)

Any abstentions?

(No responses)

And is Dr. Poston on the line at all? We should check on that again. Apparently not. Then the record will show that the motion has

passed. Thank you very much.

(Pause)

Dr. Wade has suggested that we proceed with a little bit of sort of housekeeping business on future meeting dates, and we can -- we can go over that now. It's something we would have to do sometime in the meeting. And Lew, you can review for us the upcoming meetings and then beyond that what is needed.

DR. WADE: Okay. What we have on the -- the schedule now is a Board call on January 11th.

DR. ZIEMER: Do we -- we don't have the time established for that yet, do we, or --

DR. WADE: Well, we can do that right now. Out of deference to our friends on the west coast, we could start at 10:00 a.m. eastern time.

MS. MUNN: That would be nice.

MR. CLAWSON: Be fine.

DR. WADE: 10:00 a.m. Eastern time on January 11th we'll have a Board call.

DR. MELIUS: 8:00 a.m.

MS. MUNN: Don't even start.

DR. ZIEMER: Last time we did it I think at 11:00, was it, Eastern time, and --

MS. MUNN: We did it at 11:00 Eastern time.

DR. ZIEMER: Did that work pretty well?
DR. WADE: We'll let a Westerner pick the time, 8:00 -- now you guys have got me doing it -- 10:00 or 11:00 a.m. Eastern time?
MS. MUNN: Will we be able to conclude our business if we start at 11:00?
DR. ZIEMER: I believe so.
DR. WADE: I believe so.
DR. MELIUS: One way or the other.
MS. MUNN: I would prefer 11:00.
DR. WADE: Okay.
DR. ZIEMER: Without objection, we'll do 11:00 o'clock.
DR. WADE: 11:00 a.m. on the 11th, that'll help those of us memory challenged.
MS. MUNN: Good.
DR. WADE: Then on February 7, 8 and 9 the Board will meet -- we're intending to meet in Denver, weather not permitting, on 7, 8 and 9.
MR. PRESLEY: I've got 6, 7 and 8, is it -- are we changing it?
DR. WADE: Yes, we changed it --
DR. ZIEMER: 7, 8, 9 is what I have.
DR. WADE: -- 7, 8 and 9, yeah -- long time ago. Then on April 5th we have a Board call.

I would say ostensibly at 11:00 a.m. again.

MS. MUNN: On April --

DR. WADE: 5th.

DR. ZIEMER: 5th.

MS. MUNN: -- 5th?

DR. ZIEMER: Uh-huh.

MS. MUNN: Have we abandoned the March call, I believe?

DR. WADE: Yes, in the latest e-mails that we -- trying to deal with everyone's schedule, we have now April 5th.

MS. MUNN: No 7 March.

DR. ZIEMER: No.

DR. WADE: Then on May 2nd, 3rd and 4th we have a Board meeting -- May 2nd, 3rd and 4th, a Board meeting at a location to be determined. This is -- I think we accommodated everyone's wishes.

Now that's the end of what's on the schedule now. I have proposals to make to you, so what I would -- what I would propose to do is give you dates, and then tomorrow we can talk about them and hopefully finalize dates. And all I'm doing in choosing these dates is using just a rule of thumb of spacing the meetings out, on

average, two and a half months.
So I propose on June 12th, a call. No need to comment now; we can comment tomorrow. I propose that on July 24, 25 and 26, a face-to-face meeting. I propose on Sep--
DR. ROESSLER: May I ask about July?
DR. WADE: Surely.
DR. ROESSLER: Okay. I don't have it on my calendar here, but we have a Health Physics meeting. Do you know when --
DR. ZIEMER: The Health Physics --
DR. ROESSLER: -- that is?
DR. ZIEMER: -- meeting is July 8 through 12.
DR. ROESSLER: Okay, that's good.
DR. WADE: September 6th, a call.
DR. MELIUS: Can -- can you go back --
MR. PRESLEY: Yeah, go back to July, please.
DR. WADE: July 24, 25 and 26, a face-to-face meeting. September 6th, a Board call. October 2nd, 3rd and 4th, a face-to-face meeting.
DR. MELIUS: Can you repeat those dates?
DR. WADE: October 2nd, 3rd and 4th. December 6th, a call.
UNIDENTIFIED: December?
DR. WADE: December 6th, a call. And then

January 2008 -- what year is this?

DR. ZIEMER: Yeah, it'll be 2008. A year from this January.

DR. WADE: January 8, 9 and 10, 2008, a face-to-face meeting. And that will get us a whole year of activity on the docket and hopefully give you adequate planning time.

Now again, I appreciate the fact that I've probably stepped on someone's important dates, and you can -- we can talk about that tomorrow.

DR. ZIEMER: We'll revisit this later in this meeting. Go back and look at your calendars, unless you have them already and know of conflicts.

DR. WADE: Right, we can make adjustments. I thought this would be a good way to do a two-step and try and get a year on your -- on your calendars.

MS. MUNN: Very helpful.

(Pause)

DR. ZIEMER: We're trying to determine if there's any way to track where the Senator might be in terms of his schedule.

MS. MUNN: Should we have any discussion about where we're going to meet in May?

DR. WADE: We could. I'm op-- open for discussion of where we would meet in May. I think the rule I've been using is to let the events dictate, and we should be where the people that we will be acting upon will be located. And sometimes that's hard to determine out in front, but I'm open to suggestions. We talked about going to Pinellas, so let's continue to talk.

DR. ZIEMER: Yes, Larry, in terms of what's coming --

MR. ELLIOTT: I'll try to help out a little bit here. By February you -- you have Fernald in advance now, Fernald SEC evaluation report's in your hands. You will also have I believe -- we hope to have Bethlehem Steel evaluation report to you. LANL evaluation report should arrive to -- in your hands in January, as well as Dow Chemical, and I believe that's all I can -- all I can identify at this point.

DR. ZIEMER: So Fernald and LANL might be --

DR. WADE: Well, you know, you're going to talk about Blockson today. I don't know what you're going to decide about Blockson. You've got a workgroup meeting on Chapman Valve.

DR. ZIEMER: Uh-huh.

MR. PRESLEY: NTS coming up.

DR. WADE: Got NTS issues, so I don't know that we can choose now, but it's good to get a sense of the Board as to -- to where you might like to be. Mike, thoughts?

DR. MELIUS: I think we need to probably get back to Los Alamos and Hanford because of the SEC. We haven't -- we haven't been to either place in quite some time. And given the size and the interest of the -- the groups there, so I think those should be under consideration, so forth. I think Fernald is another group that's been active and interested, so that should be -- list and -- 'cause I think it's important with the SEC process that we sort of do -- do what we can to accommodate the people in terms of public interest. It's -- clearly with the numbers involved, it's getting very difficult, but I think that -- that should probably be the -- be the major consideration.

Then there are places like Pinellas and Pantex and so forth that we haven't been to and -- at all and we -- we ought to be trying to hold meetings -- meetings there.

DR. ZIEMER: Well, there's a number of possibilities, and probably by our next meeting we'll have a better sense of what -- what's most pressing and -- and select from one of these sites. Does that give the office enough lead time in terms of hotel arrangements? Okay.

DR. WADE: Okay, so when we have -- tomorrow we'll be able to close on dates, and I appreciate the thoughts as to location.

DR. ZIEMER: Any word --

DR. MELIUS: Pinellas in July.

DR. WADE: The other issue that we have tabled, not formally, is Dr. Melius's suggestion of a working group to deal with 83.14 petitions. While we have a moment we could begin that discussion. I think with an 83.14 petition fresh in our minds, it might be an appropriate time -- or anything the Chair would think --

DR. MELIUS: I -- I think --

MR. ELLIOTT: (Off microphone) (Unintelligible) question yesterday --

DR. ZIEMER: Sorry? Oh, Larry, did you say you had some feedback for us?

MR. ELLIOTT: From the questions on General

Atomics yesterday, we can provide feedback if you want.

DR. ZIEMER: Well, let's do that, at least -- what -- sure, if you have the information now, it would be good to -- probably wouldn't take very long.

DR. WADE: And ergonomically speaking, I would suggest you either raise the microphone or --

DR. ZIEMER: He needs the exercise.

DR. WADE: This is NIOSH, after all.

MR. RUTHERFORD: Yeah, the questions were for data captures for General Atomics. We did three specific data captures at General Atomics. We also did NRC research, our search documentation, and found nothing on General Atomics for that period. And let me see, we specifically looked for AEC inspection reports and found nothing. We actually got word from the site that they think they were disposed, so...

DR. ZIEMER: State of California, did --

MR. RUTHERFORD: We -- we haven't gone specifically and -- to the State of California and asked them for General Atomics, but we -- but what we determined was the State of

California did not have a license -- or did not have control of General Atomics at that time, not to -- but --

DR. ZIEMER: They were not yet a -- an agreement state.

MR. RUTHERFORD: Well, they an agreement state. Actually in 1962 we found out they were an agreement state, but -- but from what we're reading through, the documentation, it appears that AEC actually had control over most of the material up until the early '70s, especially the special nuclear material -- (unintelligible) nuclear material.

DR. ZIEMER: Very good. Well, thank you for that information. Yeah.

MR. GRIFFON: You tell me on the data -- you mentioned three data captures --

MR. RUTHERFORD: Yes.

MR. GRIFFON: -- can you expand more on what -- what -- what did you find and...

MR. RUTHERFORD: Well, as -- I think I went over yesterday what we found. We did find external monitoring data for all employees through the -- through the operating period. We found internal monitoring bioassay data for

uranium. We found no thorium monitoring data for the period. And we found no -- actually we really found no monitoring data, internal monitoring data, for other radionuclides, as well.

CONGRESSIONAL COMMENTS
SENATOR OBAMA

DR. ZIEMER: Okay. Thank you very much for that information. We're going to pause here now and...

(Pause)

Do we have a lavaliere mark -- mike at the podium, or another mike? Where's our AV guy?

(Pause)

They're putting on a mike now, okay.

(Pause)

Ladies and gentlemen, we're pleased to have the Senator from Illinois, Senator Obama, with us today. He's been kind of on a whirlwind. I noticed you were in New Hampshire and then at the ball game last night, and here we are -- this'll be the most exciting thing you've done all week. Welcome to -- welcome to the meeting of the Advisory Board on Radiation and Worker Health.

(Pause)

SENATOR OBAMA: Can everybody hear me? Wonderful.

Well, to all the members of the Advisory Board, thank you very much for taking the time out of your planned agenda to allow me to speak to you today. I very much appreciate it and I -- I apologize in advance for the -- the fuss that -- that my appearance is causing to your meeting.

During my two years in the United States Senate my staff and I have been advocating on behalf of thousands of men and women in Illinois who worked in our nation's nuclear weapons program. They're hard-working Americans. They toiled for years under difficult conditions to produce the armaments that helped to protect us during the Cold War. And as a nation, I think we owe them our gratitude.

The reason I'm here today is because it's my strong feeling that that gratitude needs to be expressed more than just in words. As the Board members are well aware, these workers performed tasks that were often very dangerous. Day after day workers were handling a variety of radioactive substances with a minimal amount

of protection. As a result, a large number of the people who worked on the weapons program developed cancers and other radiation-induced illnesses. Many have already died and many more are dying.

I think it's also important to note that many of them were not entirely aware of the risks that confronted them at the time that they were working there, and their families were not aware of it. We just heard testimony from a woman whose father used to come home and would be shaking dust off -- off his -- his clothes after having cleaned out bins containing uranium in them, and there was no awareness on his part or his family's part that this could be hazardous.

So as all of you are aware, and I'm recognizing I'm saying stuff that -- some -- some things that you already know, to help these brave Americans, Congress passed the Energy Employees Occupational Illness Compensation Program Act in 2000 to provide compensation to eligible workers.

Now unfortunately, the process to receive compensation has proven to be not an easy one.

It requires a substantial amount of proof on the part of workers, proof of each individual worker's years of employment, the type of work they performed, the radiation to which they were exposed, as well as more general information about the plant's procedures, including its safety measures and its government inspections. For many families and many individuals, this evidence is extremely difficult to obtain, decades after the fact. Now fortunately we have the SEC petition process, which is why the Board is meeting today. So I just want to spend a few moments talking about four Illinois plants in particular that have -- or I hope shortly will have -- SEC petitions before the Board. I have some more detailed comments that I'll submit to you for the record.

At the outset let me say that this issue is a serious one in the state of Illinois. Our state ranks third in the nation in the number of sites covered under this program. More than 3,500 claims have been filed by workers and their survivors at 17 different sites. The seriousness of this problem has brought

together a bipartisan coalition of members of Congress -- Senators Philbin and myself, as well as Congressmen Costello, Shimkus and Weller -- to help these workers receive the compensation they deserve.

Today the Board considers the SEC petitions for Blockson Chemical Company in Joliet and Allied Chemical Company in Metropolis. And we have, by the way, some workers who drove the eight hours from Metropolis to be here today. At the Blockson plant 298 claims have been filed on behalf of workers; only nine have been paid.

As I understand it, an SEC designation is warranted when there is a lack of evidence to accurately reconstruct the doses of radiation to which the workers were exposed. In this case NIOSH admits that they have no monitoring data for the Blockson workers. NIOSH has, however, contended that there is sufficient information to conduct a dose reconstruction by calculating the radiation that the Blockson employees were exposed to based on radiation that workers at an unrelated factory were exposed to and on urinalysis data from some, but not all, Blockson workers.

I confess I am not a radiation expert. There are some around this table who are. But it does strike me that that is a somewhat suspect way at arriving at whether Blockson workers were sufficiently exposed to deserve compensation. It also seems to me to be contrary to the intent of the original legislation governing this compensation program, and I'd strongly urge the Board to review this policy.

I'm also concerned that no official worker outreach meeting was conducted with the Blockson workers. Seems to me that if you're going to do a dose reconstruction, you'd want to talk to all the workers, find out what evidence they have, and give them all a chance to comment on the procedure you're going to follow. So as a consequence I would urge the Board to postpone its decision regarding the Blockson SEC petition until after the Board's independent auditor has had a chance to review NIOSH's arguments.

At the Allied Chemical plant in Metropolis there have been 227 claims filed, but only 28 have been paid. Unlike Blockson, I'm pleased

that NIOSH has correctly recognized that there is no exposure data from the Allied plant with which to reconstruct the remaining doses accurately. The only concern I have about the Allied SEC is that NIOSH evaluation report does not seem to take into account evidence of residual contamination, as well as shipments from other sites around the country. Workers have explained that these shipments may have contained recycled uranium residues. For this reason, I hope the Board will consider expanding the Allied Chemical class.

At your February meeting I know that you will be considering the SEC petition of the Dow Chemical plant in Madison, Illinois as well. Unfortunately I won't be able to attend that meeting, but I want to lend my support to that petition, and I want to commend the Southern Illinois Nuclear Workers, the group that initially brought this issue to my attention, for all their hard work on behalf of Dow and General Steel workers.

Of the 253 claims on file for Dow, only two have been approved. Many of these claims are at least five years old, and unfortunately some

of the claimants have died before they were able to receive compensation. Workers at the Dow plant were exposed to uranium, beryllium and thorium metal. Few radiation monitoring badges were ever worn. There was no organized safety program in place, and workers were not informed nor provided with appropriate protection equipment.

I commend NIOSH for nominating Dow Chemical for an SEC, and hope the petition can be approved. But I am concerned about the size of the class. I understand that the coverage period will be limited to 1957 to 1960, despite overwhelming evidence that the workers were exposed to many harmful sources of radiation beyond 1960, for which NIOSH cannot reconstruct doses. As a consequence, I hope the Board will examine the time frame proposed for the Dow SEC class.

I also want to bring to the Board's attention General Steel Industries, or GSI, in Granite City, Illinois, which has significant amounts of residual contamination to be considered. In fact, the site was not cleaned up by the Department of Energy until 1996. To date GSI has filed 744 claims on file, but none have

been paid. Of the 192 cases referred to NIOSH for dose reconstruction, only four have been completed. Clearly these dose reconstructions cannot be performed in a timely fashion. NIOSH also admits that it has no monitoring data of any kind for the General Steel plant, and there is no comparable site around the country. For these reasons, NIOSH should identify General Steel for SEC status.

Finally I'd like to offer some general comments about the implementation of this compensation program. First, there is an -- a problem of inordinate delays. Much more -- based on what I'm hearing from families and the workers -- needs to be done to ensure dose reconstructions are performed in a timely fashion. The notion that claimants would have to wait more than six years after enactment of the law for their doses to be reconstructed is far beyond the kind of delays imagined when this law was enacted. To this end, I would urge NIOSH to implement performance and evaluation goals for all the employees working on this program.

Second, there is the problem of lack of information. Over the past two years the

Illinois Congressional delegation has sent numerous information requests to many of the agencies and staff involved with this program. While some requests have been answered in a reasonable time frame, many have not. If a United States Senator or a United States Congressman cannot get timely answers to reasonable questions, I'm hard pressed to imagine how a 70-year-old retired worker who doesn't have a lawyer and has cancer is going to obtain the information he needs to effectively present his claims.

Third, I'm concerned that there needs to be a more balanced perspective in the way that these claims are considered. I appreciate the hard work that all of you do, and I recognize that oftentimes we're dealing with difficult scientific issues. At the same time, there's a perception on the outside and among the workers and families that have been impacted that the Board isn't able to properly perform its responsibilities because of lack of medical and worker representatives on the Board, and this is an issue that I plan to address with the White House in the near future.

Just my -- my closing point would be this. We are talking about a -- a finite number of workers, many of them aging, who -- as I said at the outset -- conducted work that was vital to this nation's interests. In many ways they are veterans of our Cold War. Many of them were also veterans of hot wars. It strikes me that to the extent that we have a presumption that they should be helped and can be helped, we should apply that presumption. I am always concerned with bodies like this that the presumption works in the opposite direction, and that because of budget considerations we try to restrict, as much as possible, access to help on the part of the workers and their families. I hope that we keep in mind that if this had been our father or our grandfather in this same situation, we would want them to be treated fairly and that that is uppermost on the Board's mind as it makes these decisions. So I thank you very much for allowing me to address you today. My staff and I look forward to working with you on behalf of Illinois' workers who are covered by this important program, and I appreciate the service that

you're rendering, both to the country and to these workers. Thank you very much.

DR. ZIEMER: And Senator, we thank you very much for taking time from your busy schedule to be with us today.

DR. WADE: And we have that other letter.

DR. ZIEMER: I would like to call attention of the assembly to the fact that we also have with us today representatives or staff people from Congressman Weller's office and from Congresswoman Biggert's office. Are those staff people here with us now? Yes. My understanding is that there will be a joint -- I believe a joint press release by Representatives Weller and Biggert, and also that they have a -- a letter that they are I believe jointly going to prepare and send to members of this Board.

But we want to recognize the staff members. Do you -- do you wish to -- to come to the mike and just identify yourselves for the record here and that way --

DR. WADE: Just raise --

DR. ZIEMER: Yeah, just raise...

(Pause)

MR. FULLER: Yes, Andy Fuller with Congressman Jerry Weller.

DR. ZIEMER: Okay, Andy. Thank you for being with us. Andy is with Congressman Weller's office. And was there someone here from Congresswoman Judy Biggert's office, as well?

UNIDENTIFIED: (Unintelligible)

DR. ZIEMER: Okay, caught up in the wave, he said. Okay.

Well, I -- the record will show that -- that that person is here, as well, and we'll look forward to receiving the letter and the press release as well from these two individuals.

(Pause)

I think, LaVon, if -- if you would come to the mike, we may wish to follow up briefly on the questions that were before us just before the Senator arrived. I think Mark has a question.

MR. GRIFFON: Just -- just to follow up on the question of -- I -- I think it was the -- you described it as very sparse data for air sampling --

MR. RUTHERFORD: Yes, that is correct.

MR. GRIFFON: -- and out of those records you review-- can you describe that a little more

'cause you've got some --

MR. RUTHERFORD: Actually that was for the Monsanto petition.

MR. GRIFFON: Oh, that was Monsanto?

MR. RUTHERFORD: Yeah, that was Monsanto, and we actually got those reports on the document drive for you, made available, and I will go ahead and finish that -- addressing that. The Monsanto petition -- Mark had identified -- you know, asked the question how much air sampling data we actually had. And we -- we had -- what we have is summaries of data from 1947 to 1949 in progress reports. We don't have any real data prior to that time, and these are -- like I say, there are summaries. And it is alpha activity. And as I pointed out to Mark, the -- the activation products and other things, there were pure beta-emitters that we have no data to support air sampling for.

DR. ZIEMER: Okay. Yes, Jim.

DR. LOCKEY: Can you give us a summary table for the -- the General Atomics SE--

MR. RUTHERFORD: What we can and can't do?

DR. LOCKEY: Yes. Can you do that now for us?

MR. GRIFFON: Just describe it now, yeah.

MR. RUTHERFORD: I can say that -- and -- and again, this is -- this is a lot like what Stu had mentioned. In the 83.14 we'd identified a class where we -- you know, a portion of something we could not do and we wanted to move forward with that -- that class. Right now we believe we can do uranium internal dose for the class period. We believe we can do all external dose for the class period, both beta, gamma and neutron. We do not believe we can do any thorium internal exposure for the class period. Oh, and we do believe we can do occupational medical.

DR. ZIEMER: Okay. So the chart would be all external --

MR. RUTHERFORD: Uh-huh.

DR. ZIEMER: -- would -- is feasible.

MR. RUTHERFORD: Right.

DR. ZIEMER: Internal uranium is feasible. Internal thorium or other nuclides --

MR. RUTHERFORD: Are not feasible.

DR. ZIEMER: -- are not feasible. So the -- the recommendation is based on inability to do internal dose. Is that correct?

And Jim, follow-up on that?

DR. LOCKEY: Just -- just that I'm satisfied, based on the initial motion when we tabled this, and I -- I'm ready to go ahead and make a motion that we approve this SEC.

DR. ZIEMER: Okay, before you do that, let's see -- Jim, you have also a comment?

DR. MELIUS: Yeah, actually I'm not satisfied and I -- in terms of the answers we've gotten so far, and I guess my particular concern is the one that Dr. Ziemer raised, is -- is whether we have adequate justification for the -- it's actually a list of buildings and -- there, it's on page 11 of the evaluation report, sort of connecting up some of these as to whether there was -- given what can or cannot be or what can't be re-- reconstructed, are we certain that that's -- all of that is applicable to all of those facilities.

MR. RUTHERFORD: Our position was is that we had no evidence to support that those buildings were not -- should not be included. Okay? We have evidence that -- you know, if -- without enough information that -- that we could say that -- that thorium materials were not stored, used or processed in those facilities -- you

know, without that information, we were -- we were forced to go down that route.

DR. ZIEMER: And am I correct in understanding there -- there's no evidence that anyone would have been restricted, either by badge or other means, to only certain buildings. For example, if -- if I'm a maintenance worker -- well, or let's say a worker in the accelerator -- that I can go into any building on the site, as opposed to some -- you have -- you have no --

MR. RUTHERFORD: Yes.

DR. ZIEMER: -- evidence that they --

MR. RUTHERFORD: We have no evidence --

DR. ZIEMER: -- were in some way restricted to certain buildings based on --

MR. RUTHERFORD: They may have been, but --

DR. ZIEMER: -- badge, coding or whatever.

MR. RUTHERFORD: They may have been, but we have evidence of that that we've found to date.

DR. ZIEMER: So you -- we almost have to assume if they worked on the site, they could enter any of the buildings, regardless -- you know, I -- I raise questions, well, why, for example, is the analytical lab in there. But if those folks can wander into some other building, then

that's immaterial, I guess.
Did you have a follow-up, Jim, or -- Jim Lockey.
DR. LOCKEY: So I understand the default position is since you can't reconstruct thorium, you don't know what building it was in, we'll assume that it can't be constructed for anybody who worked in any of those buildings at any time.
MR. RUTHERFORD: That is correct.
DR. ZIEMER: Remind me on -- I think General Atomics was the one where we actually didn't even have a sort of straw vote. We tabled it outright; is that correct?
DR. MELIUS: Correct.
MR. PRESLEY: That's exactly right.
DR. ZIEMER: And Jim, are you proposing at this time a motion?
DR. LOCKEY: I propose a motion we approve the SEC petition for General Atomics.
DR. ZIEMER: With the caveat that we would find appropriate wording again, as we have arguing on the others.
DR. LOCKEY: Correct, and with the table outlined -- summary table as to what can be

done and what can't be done.

DR. ZIEMER: Is there a second to that motion?

MR. PRESLEY: I second that.

DR. ZIEMER: Actually technically we have to have a motion to take it off the table, but I think -- unless there's an objection -- the Chair will rule that -- that there's consensus that we take it from the table and -- unless there's objection. Any objection to taking it from the table and acting on...

(No responses)

Okay, so it's -- the motion is before us. Comments, questions? Mark.

MR. GRIFFON: Really just -- this is to refresh my memory on the uranium, you say you can reconstruct uranium exposures. What data do you -- do you have bioassay -- individual bioassay data?

MR. RUTHERFORD: Yeah, we have individual bioassay data for the period for uranium. In ad-- in addition to that, Mark, we also have some lung counts that were conducted after 1966. There -- there's questions right now how much quality those lung counts -- or how much information they're going to provide, so we are

going to focus on the bioassay data because the lung counts were -- at the time they were identified as experimental, and those lung counts were solely identified to workers that were working with uranium. They had absolutely noth-- they did not isolate out any of the thorium workers, so...

DR. ZIEMER: LaVon, do -- do you know if the uranium bioassays were uranium-specific? In other words, were they doing -- was it a chemical bioassay where you do the chemical process and actually get the uranium out or was it a gross alpha that would --

MR. RUTHERFORD: It was a gross alpha and we actually looked at the idea of using that gross alpha data to possibly bound our thorium. But the problem was is the thorium operations were so diverse and were not used in conjunction always with the uranium such that you could --

DR. ZIEMER: So you don't know --

MR. RUTHERFORD: -- develop the ratios (unintelligible) --

DR. ZIEMER: -- from the gross alpha whether it's uranium or thorium.

MR. RUTHERFORD: Right.

DR. ZIEMER: Okay. And I'm -- I'm --
MR. RUTHERFORD: And recognizing the bioassay program was set up for uranium workers, it was not specifically associated with thorium workers.
DR. ZIEMER: Gotcha. I -- I was trying to get a feel for whether or not -- what would happen if you just assumed everything was thorium, but you're still going to miss a bunch of people --
MR. RUTHERFORD: That's the concern --
DR. ZIEMER: -- is what you're saying.
MR. RUTHERFORD: -- that was exact -- our exact concern is is we may have missed the actual person that was the higher exposed individuals for the thorium itself.
DR. ZIEMER: Right. Okay, gotcha. Board, are -- are you ready to act on this -- on this motion?
Okay, all in favor, say aye -- well, let's raise hands, let's catch it here.
(Affirmative responses)
We've got one, two, three, four, five.
And opposed?
(No responses)
And abstaining?

(Indicating)

We've got two absten-- three abstentions. Okay. Actually that means the motion carries, and we will have to develop wording again on this one, as we are doing on the others. I think we're going to go ahead and proceed with our lunch break and give you a little -- little bit more time to -- to wolf down your lunch. We'll -- we'll recess until 1:00 o'clock. Thank you very much.

(Whereupon, a recess was taken from 11:43 a.m. to 1:09 p.m.)

BLOCKSON CHEMICAL CO. SEC PETITION
DR. BRANT ULSH, NIOSH/OCAS

DR. ZIEMER: We're now ready to resume our afternoon session of the Advisory Board on Radiation and Worker Health. The first item on the afternoon agenda is the SEC petition from Blockson Chemical Company. The presentation for NIOSH on their review of the petition is going to be presented by Dr. Ulsh. Also I think we may have some petitioners either present or on the line, do we? Let's double-check.

DR. WADE: I would ask if the petitioners or their representatives are here in the room or

on line, would you identify yourselves.

MR. LAPINE: My name is Michael Lapine. I'm one of the attorneys working with Dennis Kellogg, who is one of the petitioners for the Special Exposure Cohort for Blockson Chemical.

DR. ZIEMER: Thank you, Michael.

DR. WADE: And you'll have an opportunity to make a statement, if you'd like, after the statement made by NIOSH.

MR. LAPINE: Thank you, sir.

DR. ZIEMER: Any others, either here or on the phone?

(No responses)

DR. ZIEMER: Okay, let's proceed then. Brant, if you'll make the presentation and then we'll proceed from there.

DR. ULSH: Okay. Thank you, Dr. Ziemer. I was told this morning by Ray that he had trouble hearing me in my presentation. Ray, how are we now? Is it good or -- okay, all right.

All right. As Dr. Ziemer mentioned, my name is Brant Ulsh, and I'd like to talk to you today about the NIOSH evaluation of the Blockson Chemical Company SEC petition. And it occurs to me that a lot of us sitting around the table

here and a lot of the NIOSH staff are much more familiar with this process than -- than those of you folks sitting out in the audience, so I thought I might just take a few minutes to talk about what I am here to tell you and what I'm not here to tell you.

First of all, let me just walk through the process as you might have experienced it if you're a claimant in our program. When you submit a claim for compensation, it's submitted to the Department of Labor. They -- the Department of Labor verifies employment and the covered condition, so employment at a covered facility, in this case, Blockson Chemical Company; and also in this case, a cancer that might be caused by radiation. So that would be any type of cancer, with the exception of chronic lymphocytic leukemia.

Once the Department of Labor has verified those facts, they refer the case to NIOSH for dose reconstruction. Now usually we'll do the dose reconstruction and send it back to the Department of Labor and they will make a compensation decision, either award compensation or don't award compensation. Now

that's the way the process normally works.
In some situations, however, NIOSH is asked to evaluate whether or not we really have the means to do dose reconstruction to inform the Department of Labor's decision. And we are faced with that kind of a situation today with the Blockson Chemical Company.
So the message that I want to get across to you is that I'm not here to make a recommendation on whether or not compensation should be awarded to any particular claimant or group of claimants, but rather to comment on our evaluation of whether or not NIOSH can even do dose reconstruction. And there are a couple of possible outcomes, and this is certainly not meant to be an exhaustive list, but let's just consider what might happen today after I give my presentation and the petitioner has an opportunity to speak and the Board deliberates. They could choose to recommend an SEC class. And if they did that, they would issue a recommendation. The Director of NIOSH would also issue a recommendation, and then it would go to the Secretary of Health and Human Services for him to consider and issue his own

recommendation to Congress.
On the other hand, the Board might choose not to recommend the class, in which case NIOSH would continue as we have been doing, do dose reconstructions for individual claimants, and as we finish those, refer them back to the Department of Labor so that they can make a compensation decision.
And lastly, the Board might choose to take more time to think about it, refer it perhaps to their audit contractor for more consideration.
Now as I said, this is not meant to be an exhaustive list. The Board can do -- it can act in whatever manner it sees fit. But those are three possible outcomes as what could happen today.
All right. So with that introduction -- oh, let me tell you just a little bit more. We are here to consider a petition that was submitted from outside NIOSH by a group of petitioners that don't believe that NIOSH has the means to do dose reconstructions with sufficient accuracy. So let's move into the -- the meat of the presentation.
So just a little bit about what happened at

Blockson. Most of you in the audience probably already know that Blockson Chemical Company was a facility that their primary mission was to manufacture technical phosphates. Now they were -- Blockson Chemical Company was approached by the Atomic Energy Commission about taking one of the product streams that Blockson uses -- used in their commercial operations, and this is the phosphoric acid stream, and the AEC asked Blockson -- approached Blockson about separating uranium from that phosphoric acid stream. So that was the primary covered work that occurred at Blockson.

So we're not really -- we're not talking about the normal commercial work that happened at Blockson, but rather the special work that the AEC, Atomic Energy Commission, asked Blockson to perform.

And once the uranium was separated into a product called yellowcake, that material was then packaged -- it's a uranium concentrate. It was packaged into drums and shipped off-site.

Okay, so here's a little schematic that shows

pretty much what I just talked about. The material that was used in Blockson's process was phosphate rock from Florida. That -- that rock arrived on site, and it was separated into a couple of streams. The first stream -- oh, supposedly I have a way to do a laser pointer here but I'd probably wind up screwing it up. The first stream is the top stream here. This is the commercial operations that were used for the technical phosphate production.

The second stream, that the AEC was interested in, is right here, the phosphoric acid stream. And that phosphoric acid stream was diverted first into a pilot plant. There was a pilot plant built to demonstrate the feasibility of this process. That was quickly followed by -- let's see if I can do this -- Building 55. That building was constructed specifically to do the work that AEC was asking Blockson Chemical Company to perform.

Now, the important thing to note here is that in this stream here, the phosphate stream, there is a radionuclide called radium that follows that phosphate stream. When radium decays, one of the daughter products is radon.

And I know that that is a topic of great concern for the Blockson folks. I'd like to spend a little bit of time talking about that. The radon, as I mentioned, did not go -- the material that generated radon did not go into Building 55. All right? So I know there's some concern about radon. The material that generated radon, the phosphate rock, came from Florida. So I'm going to get into in a little bit how we estimated radon doses for Blockson workers. But this is an important distinction to keep in mind. Technically, the radon -- the material that generated radon didn't even go into Building 55 and wasn't necessarily part of the covered work at Blockson -- at the Blockson site.

Okay, here is a little bit of history of the Blockson site, at least as it concerns the covered work that the Atomic Energy Commission asked them to do.

The pilot plant at Blockson was constructed in 1951, and Building 55 was constructed shortly thereafter, in 1951 and '52. There was a change in ownership during the covered work. Work was transferred from the Blockson Chemical

Company to the Olin Mathieson Chemical Corporation in 1955. And in 1958 the contract was amended to specifically limit the production of yellowcake to 50,000 pounds per year. And the finally the contract ended and production ceased in 1962.

Okay. One of the first things that we did was to interview former Blockson workers -- we interviewed five workers -- to get their recollections on the details of the work that was performed at the Blockson site. And the five workers were pretty much in agreement that the work crews in Building 55 were small -- they consisted of from two to six individuals -- and they were constant. It wasn't one group of workers one day and another group of workers the next day.

Now, this is pretty consistent with the pre-project documentation that we have, some correspondence that went back and forth between Blockson Chemical Company and the Atomic Energy Commission, where they anticipated that there would be approximately 18 to 20 workers involved in this work. So you know, there were multiple shifts at Blockson, so we're in the

right ball park here.
The workers were also pretty consistent in their recollection that the access to Building 55 was controlled. You had to have a security clearance to get into Building 55, and there were guards posted to limit access to Building 55. So we don't have a lot of people wandering in and out of this building.
Now the workers did have -- the workers did have differing recollections of whether or not -- once the yellowcake was produced and it was being loaded into drums, they had differ-- differing recollections about whether or not a hopper was used or whether or not that was done by hand. To be claimant favorable, we assume that it was done by hand. That leads to -- in general, to higher exposures, so that's what we -- that's what we consider.
There was also unanimity -- consistency, at least -- that the area in Building 55 was washed and -- was washed down regularly. One of the workers recalled that it was done in between shifts.
Now none of the workers could recall explicitly a urinalysis program or activities that they

recognized as a radiological control program. Okay. So this was one source of information that we consulted, worker interviews. There were other sources. We issued a site profile. The latest revision is Revision 1, and that was issued on June 29th in 2004.

We also have urinalysis data. For those of you in the audience, what this is, it's a urine sample that was analyzed for uranium content. We have 122 samples that cover 25 workers. So again, taking into account the recollections of the workers about the number of people who worked in the building, and also the pre-project correspondence, we're again seeing that there were approximately 25 workers involved in this work at the Blockson site.

Now there were certainly more workers at the Blockson site. They just weren't involved in this particular mission.

We also consulted the site research database, as we always do. This is a database of documents that was generated by the ORAU team, our contractor. You see there the interviews with the former Blockson workers. And finally, we reviewed the material provided by the

petitioners themselves.
All right, a little bit of explanation about the process here. Once a petition is submitted to NIOSH, NIOSH works with the petitioner to get that petition into a form that will qualify for evaluation. Now I want to be very careful about how I say this. When we say qualify for evaluation, that doesn't have any implication about whether or not the petition will eventually be approved. It's just to get the petition into a form that we can adequately evaluate and come to a decision. And that qualification occurred for SEC number 45, this was the first petition, on March 6th, 2006.
Now, we also had a second petition related to the Blockson site, and that is SEC-58, and that qualified on August 9th of 2006. And shortly thereafter these two petitions were merged into one, on August 30th of 2006.
Okay. The initial class proposed by the petitioners were all employees at Blockson who worked in Building 55 from 1951 through 1962. NIOSH expanded this class to read "All employees who were monitored, or should have been monitored, and who performed work for the

Atomic Energy Commission in Building 55 and the Pilot Plant during the years of 1951 through 1962."

All right, let's talk a little bit about the bases for the petition. When -- when a petition is submitted, the petitioner presents reasons that they think that NIOSH cannot do dose reconstructions with sufficient accuracy. And these petitions -- 45 and 58, that were then merged -- had these concerns in them. First, the petitioner was concerned that there was no monitoring for worker exposure. They were concerned about the particle size that we were using in our calculations of internal dose. And they were also concerned that the inhalation to ingestion pathway was not considered. And I know that's a bit cryptic, but I've got some more slides on this so I'll cover it then. And finally, they were concerned that NIOSH had not considered uranium daughters.

Okay, so let's walk through these. Here's the concern about monitoring data, and the petitioner was concerned that we didn't have exposure records. Well, in fact it is true

that we did not have external dosimetry. We haven't located any external dosimetry. So when I say external dosimetry, what I'm talking about is a -- in this time period it would have been a film badge that the workers would wear -- probably on their lapel, that's pretty typical -- to measure the radiation coming from sources outside their body. For instance, standing near a drum of yellowcake. All right? We also have not located any air sampling for this particular facility.

We do, however, have bioassays. We have 122 bioassay measurements, which cover 25 workers. Now again, we're coming up to the number of workers here. It's pretty consistent that it's between 20 and 25, and we have bioassay measurements for about 20 to 25 individuals. And these bioassay measurements include -- they include -- from the job descriptions, they include the people that we would expect to be at the highest exposure potential. For instance, chemical operators. And they also include people who we would expect to be at lower exposure potential, like supervisors.

Okay. The next concern was how NIOSH treated

particle size. The petitioner felt that we were using an inappropriate particle size. Our evaluation of this issue -- five micrometers, which is what we use, is the default particle size recommended by the latest lung model issued by the International Commission on Radiological Protection, the ICRP. Their latest model is ICRP-66, and we use the default model -- the default particle size that they recommend. However, it's important to note that even if we chose a different particle size -- one micron, for instance -- it would result in a higher calculated internal dose by about 15 percent, but it's not infinite. So I guess what I'm getting at here is that this is more an issue that speaks to dose reconstruction or Technical Basis Documents rather than SEC. This is a number that, you know, we can discuss, we can go back and forth on, but at the end of the day it can be quantified.

Okay, the inhalation-to-ingestion pathway. The concern that the petitioner expressed was that material that is breathed in -- so if you think about working in a dusty environment and you

breathe in dust that contains some level of uranium -- it's initially inhaled. But then the lungs start to clear that material in phlegm, and some of that is -- is ingested. It's transferred to the gastrointestinal tract and it's -- and it's ingested. And the petitioner was concerned that we hadn't considered that.

In fact, ICRP-66 does include this pathway, so we are considering this. And we are also considering direct ingestion. Dust might settle out on your hands and you rub your mouth and swallow that. That's direct ingestion. We also are considering that, as well.

All right, uranium daughters. The petition expressed the concern that we were not considering the beta-emitting daughters of uranium; that is the thorium-234 and protactinium-234(m). In fact, our revision of the site profile does address this progeny's in-growth and those doses from those radionuclides are considered.

Okay, so NIOSH's evaluation report. When a petition is qualified, NIOSH is obligated to consider the bases in the petition and then

issue an evaluation report that details our findings on this. And we issued the evaluation report for the Blockson petition on September 1st of this year.

And I would also like to talk a little bit about dose reconstructions, and our legal representative wanted me to stress that on the back table there are some example -- hypothetical dose reconstructions. Those are not meant to resemble in any way any individual's real dose reconstruction. These are examples that -- that we came up with just to demonstrate to the Board how we do dose reconstructions. So don't wonder if -- if one of the examples is yours. It's not, I assure you. And as I mentioned, those are on the -- on the back table for -- for your review.

We have three dose reconstructions -- hypothetical dose reconstructions that we've put in the back. I think one is for a skin cancer, one is for a lung cancer, one is for a colon cancer. We felt that this was perhaps representative of the types of dose reconstructions that we are doing at the Blockson site. And let me go into a little bit

more detail about how we are doing those.
First of all, the external dose. Recall that I told you that we don't have external dosimetry, so what we have done -- based on the production numbers, we know how much uranium was produced at Blockson. We have bounded the external dose that might be expected in this type of activity. First of all, we have assumed that a worker is working in proximity to -- to aged yellowcake.
Now let me tell you why that's important. Fresh yellowcake gives off a very minimal amount of radiation, so the external dose from fresh yellowcake is pretty minimal. As that material gets older, the daughters grow in and the dose rate goes up. So if you think for a minute about the process at Blockson, Blockson was producing fresh yellowcake, and as it was produced it was drummed and shipped off-site. So really when the workers were in close proximity, doing that hands-on work with the yellowcake, it was young, freshly-produced yellowcake. The external dose from that yellowcake would have been minimal. However, to be claimant favorable, to bound the external

doses, we assume that it was aged and that the workers spent -- Tom Tomes, my colleague, is here to help me out -- I think it was eight hours a day one day a week, and this is based on the production numbers, that was the geometric mean that we assumed. We also -- we assigned a distribution here, and the high value -- Tom, help me out -- was...

MR. TOMES: Forty hours per week.

DR. ULSH: -- 40 hours per week, standing one foot from a drum of yellowcake.

Now, we're not representing that this is realistic of what the workers might have been exposed to, but we're representing that this is a bounding estimate of the external dose of what the workers might have been exposed to.

And then for the internal dose, those are based on those 122 bioassay measurements that we have for the 25 workers. We generate a coworker distribution that we use to estimate internal dose for the people who worked in Building 55.

And finally radon. We are considering radon, and I know it's a topic of concern because we have used radon concentrations -- first of all, there are no measured concentrations of radon

during the operational period for Blockson. If there were, we would have used them. However, (unintelligible) concentrations from facilities like Blockson in Florida.

Now, you might ask -- logically -- what does a facility in Florida have anything to do -- how can we apply those data across sites. Well, remember I told you that the material that Blockson was working with, where it came from. It came from Florida. And so the mills that were considered in Florida used the same material that the Blockson site used, and the operations were similar. So we have some confidence that the radon estimates that we have used are applicable to the Blockson site. And also recall that in the Blockson operation the material that generated the radon didn't even go to Building 55. However, NIOSH couldn't say that, when that material was shipped to other places on the Blockson site, some of that material could have dispersed into Building 55. So we simply conducted a bounding estimate. We said well, it can't be higher than if all that radon-generating material was in Building 55 itself. So that's, in effect,

what we assumed. All that material goes into 55, generates radon, and that -- that's how we calculated the radon dose that -- that we applied in our dose reconstructions.

Okay, let me give you the status on the Blockson claims. Now, there is always some confusion when we present numbers like this because the Department of Labor has a certain set of numbers and that reflects all of the claims that are submitted to the Department of Labor. Now a subset of those are referred to NIOSH for dose reconstruction, and those are the ones that had qualified employment or a qualified condition, so don't expect that you'll hear the same numbers from the Department of Labor that you'll hear from us. I'm only speaking of the ones that -- that DOL, Department of Labor, has referred to us for dose reconstruction, and there are 113 of those cases that have been sent to us. We have completed dose reconstructions and returned them back to DOL -- 93 of those.

Tom, I think -- we talked on the way up here, of the remainder of the 93, we've completed them and they're in the claimants' hands; is

that correct?

MR. TOMES: Except for one.

DR. ULSH: Except for one. So that's the difference that you see there.

Okay. As is typical in the SEC process, we have a two-pronged test. Those of us around the table have seen this before. The first question that NIOSH is -- has to ask is, number one, is it feasible for NIOSH to estimate the level of radiation doses that people in this class might have been exposed to with sufficient accuracy. And if the answer to that question is yes (sic), then we are then obligated to go on and consider is there a reasonable likelihood that the health of the people in this class could have been endangered. But you only have to go to number two if the answer to number one is yes (sic). The conclusion of our evaluation is that the information that we have available -- the process records, the urinalysis data, the recollections of the workers that we talked to and information that we have on the source term -- are sufficient for us to do dose reconstructions of sufficient accuracy.

Okay, so here are the types of -- the types of exposure that we consider in a dose reconstruction, and we have concluded that we can do dose reconstructions of sufficient accuracy on the internal side, material that gets inside your body through ingestion or inhalation, for uranium and its daughters and for radon. And we have also concluded that we can estimate the external doses, both from the beta/gamma that the workers might have been exposed to and occupational medical X-ray.

So here's the -- I think it's the last slide -- that summarizes our position. And that is that for the time period in question, January 1st, 1951 through the end of 1962, we have concluded that it is feasible for us to do dose reconstructions of sufficient accuracy.

Okay, that is the end of my presentation. I'd be happy to entertain questions.

DR. ZIEMER: Before we go to the question period, we'll have an opportunity to hear from the petitioners.

Oh, Mr. Kellogg's representative is here, go ahead.

MR. LAPINE: Yes, representing Mr. Kellogg --

thank you, Mr. Ulsh, thank you, ladies and gentlemen of the Board. As part of my presentation in response to this, I want to address two factors. Number one is the general flawed nature of much of this. This is based off of interviews of five workers -- five. And statements are made that we know how much was produced at Blockson. No, you don't. You're basing this off of a maximum that 50,000 pounds were produced a year and that's what the contract said. Other reports, based -- such as the one that USA Today based their report off of indicate that 2 million pounds came out of there during that two years. These are all based off of completely unsubstantiated claims. That being said, I look forward to the moment, and I wish each and every worker and their family had the opportunity to speak. It's easy to get lost in the dose reconstructions and forget that these have impacted just about every single family of individuals who worked there. Every single one has suffered. It's that simple.

As part of this, I would like to defer briefly to Ms. Marcoski and Mr. Stephan. Ms. Marcoski

will address some weaknesses in the dose reconstruction and Mr. Stephan will suggest a plan for future reference. Thank you, ladies and gentlemen.

THE COURT REPORTER: Could I get your name, please?

MR. LAPINE: Michael Lapine, L-a-p-i-n-e. Thank you.

MS. MARCOSKI: I guess I'll -- I'll work backwards from some comments that I scribbled down. With the external dosage with beta/gamma rays, there was no dosimetry badging. You're making this on a assumption of a Florida phosphate-producing plant that has totally different geographic situation. It's outdoor Florida. Their windows are probably open. Radon, you know, can be dispersed when it's open to air. Blockson, you're looking at a place that functions in winter months where you're looking at more closed-in areas, so I would dispute that having adequate external dosing.

When you do such a large feas-- feasibility of dose reconstruction, there has to be some percentage of error. I know you've worked very

hard on this and put together things to the best of your ability. But when you have so many assumptions, what type of percentage of error are we looking at? Is it ten percent? It goes with mo-- most medical -- mathematical calculations and basic statistics.

Back to the phosphate rock, I was trying to make the analogy of an egg yesterday. I don't think you could just defer to the operations that were in Building 55 alone. A certain percentage of that phosphate rock that was brought from the Florida facility, even though not all of the chemical processes occurred in Building 55, it still -- part of it had to occur so that uranium could be extracted for atomic weapons. I don't believe you could just segregate out Building 55 alone and look at that part.

I believe higher calculation can be given to radon and radon exposure. In talking to Mr. Miller yesterday, a 95th percentile has been given to most of this in your calculations. I understand the radon was given at the 50th percentile, and I'm not sure why that calculation was given such a low rating based

on all the other mathematical formulas were given the 95th percentile. And it does make a difference in the lung cases. There's a direct correlation of radon and lung cancer.

I guess I did (unintelligible) some other situations with petitioning. With Allied Health there was a SEC petition that looked like it was passing because they didn't have adequate monitoring data. I guess I would question some of the assumptions and wondering if they are adequate based on such a small representative of five workers and there were 113. I do have a seniority list. The plant only employed somewhere between 200 and 300 people. That isn't a large plant.

I guess that's all unless there are any other comments.

DR. ZIEMER: Thank you.

MR. LAPINE: Thank you, Ms. Marcoski, and next I am going to ask Mr. Robert Stephan, the regional director for Senator Obama's office, to address the Board.

MR. STEPHAN: That's Robert, last name is S-t-e-p-h-a-n. Thank you guys for the opportunity to let the Senator speak this morning. He

wanted me to follow up on a few of the points that he made in his speech. Number one was the request to postpone this vote until February. He wanted to see if you guys were willing to do that. I don't know if that is an answer you can give today or not.

The other -- the other issue is that he -- he wants to make sure that specifically it is on the record that he requested that SC&A be referred this issue so that they can, you know, just take another look and give a second opinion on the Blockson process, which we think is reasonable and I think is in line with your, you know, prior activity to -- to sometimes go slow if need be and make sure you get it right.

The third issue is that I want to make sure that we get the class definition right. NIOSH was very generous this week and they gave a briefing to our office, and at that time and in subsequent e-mails with the NIOSH staff, it's our understanding that all employees at Blockson are covered in the petition. However, the -- the petition as it is written in the evaluation report, and as it was presented earlier -- I think we have a problem of words.

The petition says the Pilot building, Pilot facility and Building 55, and the way many people read that, including our office, is that that does not include all the workers. So I'm just wondering if we could touch base on that. I know we talked this week and -- and Mr. Elliott, and -- and it was a little bit different in our discussion and the follow-up and then what is on there, so I'm just wondering, maybe you guys can clarify that for us.

UNIDENTIFIED: (Unintelligible)

MR. STEPHAN: Okay. Thank you. And then the last point is that it -- it is -- in the Senator's comments, which I'm not sure that he made totally clear, the policy that he was requesting be reviewed is the policy of using coworker data. We know that's a big issue. We know it's very difficult, you know, for you guys to move forward if you don't consider coworker data. But from the Senator's point of view, he -- he -- he is asking, in a big picture sense, not just at Blockson, that the Blockson coworker data be reviewed, but that the policy of using coworker data throughout

the entire implementation of the Act is reviewed. So we just want to make sure we have that on the record. And certainly if you guys are willing to commit now to getting SC&A involved, that would be good news that we can report back to the Senator. Thank you.

DR. ZIEMER: Thank you, Robert. We can open the floor -- any other petitioners to speak, on the phone or here?

MS. PINCHETTI: Yeah, this is Kathy Pinchetti. I'm a petitioner for number 58 -- am I getting feedback?

DR. WADE: Could I ask you -- just let me interrupt for a minute. Could you just speak right into the -- the -- the handset and speak as loud as you can for us, please.

MS. PINCHETTI: Okay. Is that better?

DR. ZIEMER: Yes.

DR. WADE: Yes.

DR. ZIEMER: Repeat your name, please.

MS. PINCHETTI: Kathy Pinchetti, P-i-n-c-h-e-t-t-i.

DR. ZIEMER: Yes.

MS. PINCHETTI: I am the daughter of William Bell, who's there in the audience with my

sister. And initially I filed the SEC specifically with my father in mind because that was the only information I had was his direct report. And then it became included to include all the workers in Building 55. And it originally came out of my filing with EEOIC and that application was denied because he didn't have one of the specified cancers. I also applied with RECA, Radiation Exposure Compensation Act. They also denied it because they felt that, you know, he didn't meet one of the qualifying illnesses. But then there was information on the internet, which is where I got a lot of my information on how to go about applying for him, and it said that there's no requirement that the members of the class even have yet to be diagnosed with cancer. So then I started the SEC petition and then after I submitted it, then it was merged with another one that I think included people other than those that were specifically identified as being maybe those 25 workers that had the urinalysis done, that showed, you know, how they were sickened. But my father was actually in a VA hospital for three weeks during the

time he was working in Building 55 and he had symptoms of vomiting, he lost 35 pounds in a month. He had a rash on his hands, all sorts of problems, and they were giving him cancer treatments. I believe it was Compamine, that's a cancer-treating drug; also atropine, which is for nerve poisoning or nerve agents and poisoning, and also phenobarbital, and that's pretty heavy-duty medication. So he was really sick and I think -- all in all I think he was off work maybe six weeks, and so that was my motivation for filing the application.

I am impressed with the summary and just in general how people are able to reconstruct things like crash sites where you don't have to actually have information from back then. I don't think in the '50s they -- they were very sophisticated in how they monitored things or -- or what sort of rules they would -- they would implement, but my dad worked more than 40 hours a week. There were a lot of times he worked double shifts and I think that was pretty typical of the bunch that was in Building 55. I mean if there was only like 16 to 25 people that were allowed in there, and

they had to cover three shifts, there was a lot of doubles. So I don't know if he was alone in that, but I know it for a fact that he always worked a lot of doubles, so his exposure might have been even higher.

What else did I want to say? Other than about particle size or daughters or any of that stuff about the exposure, but I think -- I do believe that that does need to be clarified, who is covered by this petition. Is it just the 16 to 25 people in Building 55 or anybody that was employed by Blockson during that ten-year period?

DR. ZIEMER: Okay. Thank you very much, Kathleen.

MS. PINCHETTI: All right. Thank you.

DR. ZIEMER: On behalf of the petitioners? I guess it'll be up to the petitioners. I'll allow it if it's okay with the petitioners. I think she's speaking on behalf of the claimants. Yes.

UNIDENTIFIED: Okay. Thank you. I don't know if you'll be able to (unintelligible) microphone.

DR. ZIEMER: Give us your name.

MS. PIERCE: My name is Lois Pierce. My father was Rudolph Dernalz*. He was probably the number fifth in play on a list for Blockson Chemical. He had about 37 years there. Me and my sisters had applied for this compensation and we recently got a second dose reconstruction. And the first one was -- that was sent was like October 2003. They had listed two cancers, which we had talked about through papers we had from the doctors that we could get our hands on. When the second of the recent dose reconstruction came through, November 9th of this year, it eliminated one of the cancers. So my -- we are doubtful why wasn't all the information forwarded. It was both by NIOSH and one of the cancers is listed on the Act of 2000, the year 2000, the Occupational Illness Program put out by the Department of Energy, and why it was changed, we have no idea. So we feel that the dose reconstruction is not true to what it should be because they eliminated a cancer. They only put down one cancer and I have paperwork where it was two back in 2003.

My dad worked with the chemists, and he was

called out during the night. He was in Building 55. My brother-in-law even signed a paper that was like an affidavit or something saying he knew my dad was in Building 55. He wore goggles and gloves, we knew that. And all his work clothes came home, which my mom washed, and he did shower -- that was the only building with a shower was Building 55. We knew there was security. My father didn't talk about what he did. He was very respectful of his bosses because he cared a lot about them and being one of the first employees at Blockson and number five on a list of, you know, how many, I assume he's probably in that 25 urinalysis but I'm not sure.

Now my sister did tell me there was a thing about some paperwork we got where they said they did X-rays of their chests. We never remembered our dad going for an X-ray of his chest, and he would have done that, I assume, away from Blockson because I don't think they had the facility to do anything like that.

But that's what I wanted to say to you. I think they need to go back -- with our claim, I don't know what they did with others, but 2003

it was two cancers; now it's one, and it's the same department, NIOSH, and why they changed it, I have no idea. And I assume I have to make a phone call to somebody.

DR. ZIEMER: There are NIOSH people here that will help you address this particular case yet while you're here, so --

MS. PIERCE: Okay, thank you.

DR. ZIEMER: Thank you very much. We can open the floor for questions, and I'd like to start. I'd like to get some clarity on a couple of items. I think that, Brant, you talked about the inventory there and I -- I think then we heard from Michael about -- I think it was USA Today story that perhaps had a different -- and -- and I'm wondering if we know the source of the USA Today's information versus NIOSH's -- clearly like an order of magnitude.

Now you realize that many of us at this table tend not to trust what we read in the media all the time, although sometimes they have better sources of information than we do. So do -- do you have some notion that would help us clarify that issue of that inventory? It seems to be pretty wide apart.

MR. LAPINE: (Off microphone) I don't know the source of that article. I know that (unintelligible) USA Today report was the catalyst that (unintelligible) brought to me (unintelligible) --

DR. ZIEMER: Yeah.

MR. LAPINE: -- (unintelligible) --

DR. ZIEMER: Right.

MR. LAPINE: -- in that (unintelligible) Blockson (unintelligible) report. It did suggest (unintelligible) reports of (unintelligible) orders and the like. It was estimating 2 million were taken out in the two years -- or the ten years --

DR. ZIEMER: Uh-huh.

MR. LAPINE: -- (unintelligible) the uranium extracted.

DR. ZIEMER: Might be helpful if we could track that down, or at least get some clarity.

MS. MUNN: I'd like to know the date of that USA Today.

DR. ZIEMER: Yeah, and maybe we can find out when that report was and track it down. But let's hear from Dan first.

DR. MCKEEL: The USA Today series was reported

by Peter Eisler, that's E-i-s-l-e-r, and my recollection of that series -- I'm trying to think of the year, I'm sor-- I don't want to say something that's wrong.

DR. ZIEMER: Do you have any idea, Dan, what his source of information was?

DR. MCKEEL: Well, he -- he compiled -- I remember in the lead to that series -- he said 100,000 primary documents which he put into a database. And about two years ago actually I contacted USA Today to see if he was -- would be willing to share any of that information. Now Peter -- I saw a story from him a few months ago. Actually I saw a story from him about the Hostettler subcommittee hearings, so he's still active, alive, well, and I would imagine that database has perhaps grown. But that's a major resource for this program. I don't know, I -- I understood that they went to -- in that story they said they went to national records, so they did a data -- a massive data capture effort from the same kind of sources that NIOSH and all of us have available and -- you know, but specifically for Blockson where they came up with that large

number. But there may be documentation like that that could be sought and retrieved.

DR. ZIEMER: Thank you.

DR. MCKEEL: Yes, sir.

DR. ZIEMER: Brant, do you or Larry have any notion or can you help us understand that discrepancy?

MR. TOMES: I'm Tom Tomes from NIOSH. We do have some source of good records for production quantities at Blockson, and they were in August through December of 1955. We located some monthly reports of production out of the AEC offices, and they give details of monthly reports that was produced every -- every single month that month (sic), and a total of the -- the total production from Blockson had produced through December, 1955 from the start of the contract, and that is in the Technical Basis Document. However, we don't have any -- any specific details after 1955.

DR. ZIEMER: Thank you.

DR. ULSH: Except -- I don't know -- am I on? Okay. We do have where the contract was amended to place a limit on the production. I think that occurred in 1958, and the limit was

-- 58,000 pounds per year?

UNIDENTIFIED: Fifty thousand.

DR. ULSH: Fifty thousand, 50,000 pounds per year.

DR. ZIEMER: Thank you. I'd like to -- oh, Larry, you have an additional comment on this?

MR. ELLIOTT: I think it's very easy to get confused when we start talking about numbers. We would need to see the references that -- that are being used here. What we do know about Blockson is that they were in a commercial process of -- of working up limestone or phosphate and rock, and the AEC come to them and said you're doing this commercial base process. We would like to take a side stream off of that to understand and determine whether or not uranium can be captured in this side stream process. So I don't know if this is the case, but it could be that the 200,000 pounds per year may be the incoming stone that was being processed. We'd have to look at that. But what we do know is what you've just heard Tom Tomes say. The contractual language that we have been given in the documentation from the Department of Energy

and the AEC was that they were seeking 50,000 pounds, total, over the course of the contract -- of uranium. So but -- pardon me? Per year, per year.

DR. ZIEMER: Let me also ask a somewhat related question and I -- it has to do with the issue of Building 55 and the language as to what defines the -- the cohort. What do we know about the restrictions on who could go into Building 55 and whether other people on the site in other operations -- one of the petitioners said he thought -- he was told everyone was covered and --

MR. ELLIOTT: Well, this -- if your question goes to coverage --

DR. ZIEMER: Yeah.

MR. ELLIOTT: -- our understanding of the -- the facility definition for coverage is Building 55 or the -- and the Pilot plant.

DR. ZIEMER: Or anyone who had access to that building?

MR. ELLIOTT: Anyone who worked at Blockson Chemical -- and my understanding -- and Pete Turcic's here, he might want to opine about how DOL determines eligibility, but it's our

understanding at NIOSH that anybody who worked at Blockson Chemical Company can file a claim. Their eligibility's determined on did they work there, not whether they worked in 55 or the Pilot plant --

DR. ZIEMER: That worked there.

MR. ELLIOTT: -- but did they work at Blockson, and did they come up with a cancer. If the answer to both of those questions is yes, they are deemed an eligible claimant and sent to us for dose reconstruction.

DR. ZIEMER: So the Building 55 issue doesn't arise as far as Labor's concerned. Is that what I'm hearing?

MR. TURCIC: That's correct, Paul. It's -- when -- you know, when we look at these things, you know, it starts out as an empirical -- looking at what data is available. Early on in the program we found out that there are no records that exist that can put people, you know, in the mainstream versus Building 55, so we put it -- you know, we have a bulletin -- basically we made the policy determination that if -- if we confirm employment at Blockston (sic) Chemical, the facility is the entire

facility.

DR. ZIEMER: Okay. So even though it sounds, from what some of the petitioners even said, that there was a sort of a restricted area, you can't determine who actually was kept out or allowed in there.

MR. TURCIC: That's correct, and that's why, you know, if that language gets in, though --

DR. ZIEMER: Right.

MR. TURCIC: -- that, you know, causes confusion.

DR. ZIEMER: Right. So is it important that the class definition include the mention of Building 55? Apparently not.

Okay, thank you. That's helpful. I think I had one other question. Let me defer -- I think Dr. Melius is waiting patiently.

DR. MELIUS: I always defer to the Chair, I don't --

DR. ZIEMER: Right.

DR. MELIUS: My -- my -- I have one question to start with and that's the -- the issue that was brought up by the Senator regarding whether or not there'd been any outreach activities for this site. I guess I was a little surprised to

hear that in the five or six years of the program that there had not been any outreach activities or any meetings held here and I guess I'd like clarification on that. I...

DR. ULSH: Dr. Melius, I can tell you that the one -- one meeting that I attended was a DOL meeting. Pete, wasn't that for residual contamination? I think that was the subject of --

MR. TURCIC: Early -- early on when the program first started, we did some 85 town hall meetings and we were in Joliet then, and then there was a residual contamination outreach, also. So there's at least two that I'm aware of.

DR. MELIUS: Yeah, but -- but none specifically by NIOSH in terms of developing their Technical Basis Documents and regarding -- and regarding this Special Exposure Cohort petition?

DR. ULSH: You're correct, Dr. Melius, that we didn't have an official TBD rollout outreach meeting conducted by NIOSH with Blockson. We did not. What we did have was the interviews with the former workers that informed the SEC petition, but there was no official NIOSH

outreach meeting related to the TBD.

DR. MELIUS: And so that -- that was the interview with the five workers. Correct?

DR. ULSH: That's correct, Dr. Melius.

DR. ZIEMER: I remember now my other question. The -- the phosphate rock was already being used, as I understand it, by Blockson for other chemical extractions or --

DR. ULSH: That is correct, Dr. Ziemer. The primary product of the Blockson site was technical phosphates.

DR. ZIEMER: Right. And one of the petitioners asked the question about the assignment of -- of radon exposures.

DR. ULSH: Uh-huh.

DR. ZIEMER: And I'm unclear now -- if you have a -- if you have a claimant -- well, of course if there's an SEC, it becomes a sort of a moot point, except you might have non-- you may have some cancers which are in a category not covered by the SEC. If such a claimant came, what do we do about, for example, radon exposure assignments? Are -- you can -- you said you can do medical?

DR. ULSH: Well, it's -- it's NIOSH's position

that we can reconstruct all the -- all of the doses, and it's really not a moot point --

DR. ZIEMER: Oh, okay.

DR. ULSH: -- in terms of if the -- if the Board chose to recommend an SEC class --

DR. ZIEMER: All right, but if -- if that were the case, but -- all right, take -- take a regular -- assume there's no SEC, then --

DR. ULSH: Okay.

DR. ZIEMER: -- what do -- what do we do about the radon part for any individual?

DR. ULSH: That is included in all the dose reconstructions that we do at Blockson, based on the radon values that were measured in similar facilities using similar source material, and that is included in the dose reconstruction --

DR. ZIEMER: Okay.

DR. ULSH: -- for -- for lung cancers.

DR. ZIEMER: Okay. Are these radon levels simply based on buildings of similar size that were handling Florida phosphates or -- what's the basis for the radon calculation.

DR. ULSH: I'm going to let Tom answer that one.

MR. TOMES: There was a Technical Information Bulletin produced by ORAU that discussed the exposures from radon -- radium and radon in phosphate facilities, and that was an evaluation that included multiple results of different studies published by Florida and other studies, and it's a compilation of various results -- indoor measurements of chemical processing plants (unintelligible) general data used, and the -- and the recommendations from that OTIB was what we adopted for the operational period at Blockson.

DR. ZIEMER: Thank you. Other comments or questions?

PETITIONER: I have one question. This is Petitioner (unintelligible) --

DR. ZIEMER: And the petitioner...

PETITIONER: -- 58.

DR. ZIEMER: Speak -- speak in to the --

PETITIONER: Okay. Kathy Pinchetti.

DR. ZIEMER: Yes, Katherine.

MS. PINCHETTI: Okay. You had said that when you were clarifying the definition, you defined it as people who worked there and come up with a cancer, so that sounds kind of like the EEOIC

requirement that you have one of the named cancers in order to qualify for compensation. But under SEC it says a petition is prepared representing a class of employees whose members have or have not filed claims with Department of Labor under the Act. There's no requirement that the members of the class even have yet to be diagnosed with a cancer. I just wanted to clarify if the people that qualify for compensation still have to have one of the identified cancers.

DR. ZIEMER: Yes, and Larry Elliott will speak to that, but there are some so-called presumptive cancers that would be a condition of the compensation. Larry.

MR. ELLIOTT: The Special Exposure Cohort and the classes that are represented in the Special Exposure Cohort represent all workers who find themselves having time spent in that class definition. If they -- whether they have cancer or not. If they have cancer, then it -- if the cancer is one of 22, then they are presumed -- the cancer's presumed to have been caused by their exposure during that time frame at that particular work facility. So yes, you

are correct, ma'am. The class would represent those individuals who have and those who do not have cancer at this point in time, if there was a class to be added. NIOSH is --

DR. ZIEMER: But to compensate, they have to have the cancer.

MR. ELLIOTT: Yes, to be compensated, you have to, unfortunately, have acquired cancer. Let me -- let me make sure that there's -- I want to make a point of clarification here.

NIOSH is here today presenting a report on an evaluation of this petition, stating that we feel we have the ability to reconstruct dose for the various types of radiation exposure that were encountered by the workers at Blockson Chemical. If the Board were to say, or Board were to take an action to recommend that a class be established for this particular facility, then it's absolutely correct that the definition needs to be carefully considered. Our definition for this class, as we -- as Brant has presented it this afternoon, under the context that we feel we can reconstruct dose, includes all people who worked at Blockson Chemical for those years. But if you

go forward with a recommendation to add a class, what I think Mr. Turcic was alluding to earlier is you don't want to include Building 55 and the Pilot plant in that class definition for recommendation. You only want to say Blockson Chemical. If you -- if you narrow it just to Building 55 and Pilot plant, which we have done saying we can reconstruct all dose, because that's the covered facility here, if you narrow it for a recommendation to add a class and you include those words, Building 55 and the Pilot plant, you've also narrowed the eligibility. Okay? I just want to make sure that that's on the record. I think that goes to Mr. Stephan's question and Senator Obama's concern.

DR. ZIEMER: Thank you, Larry. That's helpful. Also could -- Larry, could -- or maybe Brant can tell me, on the issue of the amount of inventory that was processed, will that -- if -- if in fact the -- the greater number were the one, does that have any impact on your ability to reconstruct dose? It doesn't appear to me that it would, but...

MR. TOMES: I believe we'd have to take another

look at the numbers, what we'd have to do, you know, far -- far as the -- and -- and to re-evaluate it. I --

DR. ZIEMER: Well, to --

MR. TOMES: -- (unintelligible) source term (unintelligible) --

DR. ZIEMER: -- what extent does the knowledge of that inventory play into the -- into the reconstruction, as you see it now?

MR. TOMES: Well, we just need to look at --

DR. ZIEMER: Is that --

MR. TOMES: Well, ba-- basically what we're looking at right now is producing a sma-- a few num-- a several drums, you know, of -- of material, and -- and we just have to consider is our evaluation satisfactory for more -- bigger source term and --

DR. ZIEMER: So the source term does enter into the calculation, so that would be an important piece of information.

DR. ULSH: Dr. Ziemer, perhaps I could add to that. It probably would not affect the way that we calculate internal doses because that's based on the urinalyses. But where it might have an impact would be on the way that we

calculate external doses. Then it would be a scaling factor. If we find out that it's four times what we've estimated, then we -- we would perhaps, I don't know -- I'm going a little further than I should, perhaps -- that -- that might have --

DR. ZIEMER: I understand what you're saying.

DR. ULSH: Okay, then I'll stop.

DR. ZIEMER: Okay. Other comments or questions?

DR. WADE: Mr. Stephan has.

DR. ZIEMER: Mr. Stephan has an additional comment.

MR. STEPHAN: Thank you. I want to thank you, Mr. Elliott, for the clarification. So I think we are clear now for the workers. What is not happening today is there will not be a vote on SEC petition for Blockson for only Building 55 and the Pilot facility; that that is not happening here today. Is that correct?

DR. ZIEMER: Actually the Board hasn't determined that there will be a vote or not be a vote.

MR. STEPHAN: Okay.

DR. ZIEMER: All that he has done is clarify

what happens --

MR. STEPHAN: Okay.

DR. ZIEMER: -- in each case.

MR. STEPHAN: Okay.

DR. ZIEMER: That is, if -- if the NIOSH recommendation, which says we can reconstruct dose and therefore we don't need an SEC -- is what it says --

MR. STEPHAN: Uh-huh, okay.

DR. ZIEMER: -- if -- if that were followed, then the -- the point about Building 55 is basically a moot point.

MR. STEPHAN: Okay.

DR. ZIEMER: If we were to recommend that there be an SEC --

MR. STEPHAN: Uh-huh.

DR. ZIEMER: -- then it covers anyone at Blockson and you don't have to specify Building 55.

MR. STEPHAN: Okay.

DR. ZIEMER: That would be my understanding of it.

MR. STEPHAN: Okay.

MR. ELLIOTT: Let me say it one more time a different way. If we were coming to you today

and presenting a recommendation to add a class, we would not have presented the class definition that you see today. We would have presented a class definition that said all employees who worked at Blo-- who were monitored, or should have been monitored, at Blockson Chemical. We would not have mentioned Building 55 or the Pilot.

DR. ZIEMER: This definition grew out of the original petition, I presume, rather than -- 'cause you would have -- you would have amended it somewhere along the line.

MR. ELLIOTT: The definition that we presented to you today in our evaluation for this particular petition speaks to all workers who came to Blockson to work. Okay? And it speaks to the covered part of that facility, and we're saying we feel we can reconstruct dose.

If we were coming to you and saying we don't think we can reconstruct all the dose, we would have presented to you a -- a different definition of the class that would not have spoken to Building 55 or the Pilot plant.

DR. ZIEMER: Thank you.

MR. STEPHAN: Thank you, Mr. Elliott. The --

the main point that I wanted to underscore, which was brought up about the worker outreach meeting, the -- the worker outreach meeting that Senator Obama is looking for for Blockson is -- is a worker outreach meeting similar to what I believe NIOSH did -- I know Stu was there and Laurie Ishak, I believe; numerous NIOSH staff, is that right? -- when they came and did a worker outreach meeting for General Steel Industries in the southern part of the state, and Dow Chemical. Those were all affidavits on the record, and so I'm just trying to make sure that I'm differentiating, Mr. Turcic, that that is different than the town hall meetings. And so I think it's fair to say that with a decision such as this, interviews over the telephone with five workers, you know, is -- as our opinion is, it's not sufficient. But it goes to the issue of confidence. Whatever the decision is that comes about, we'll have more confidence, and you will have more confidence, in the decision if there is some outreach on the record, publicized in the media well in advance where people can come testify, a -- a written report

is produced from -- from all the workers. That is a step we would hope would take place. I just want to differentiate between what we're looking for and maybe what has taken place in the past. And I do want to give credit to NIOSH for what they did on the Dow and the GSI site. That was very helpful. Thank you.

DR. ZIEMER: Thank you. Larry.

MR. ELLIOTT: We can certainly do a worker outreach meeting at Blockson and enter-- and entertain comments and thoughts about the site profile that we have developed. We can present dose reconstruction examples and explain how we do dose reconstruction. But we -- we -- it's not that we don't want to do it. There are more than 300 sites covered under this program and unfortunately we've not been able to get around to all of them, and my apologies for that. But yes, if you want us to, we'll -- we'll schedule a worker outreach meeting for Blockson in the very, very near future.

DR. ZIEMER: Wanda.

MS. MUNN: Perhaps the comment should be made -- I'm not sure that everyone who hears what's transpiring here understands that any

individual who has any claim at all has been interviewed. Not perhaps face to face, but they've certainly been interviewed, more than one time, by telephone. Is that not correct, Dr. Elliott -- Mr. Elliott?

MR. ELLIOTT: It's Mister --

MS. MUNN: Yeah --

MR. ELLIOTT: -- thank you.

MS. MUNN: -- I'll keep trying.

MR. ELLIOTT: I have aspirations of being a doctor sometime, but I don't know if I'll ever get out of my childhood to get there. But anyway, yes, you're absolutely correct and -- and I don't speak to that because there's a difficulty there with the survivors. You know, that -- they're put at a disadvantage through the interview process, but everyone who files a claim gets an interview at the start of the process. We hope to understand from that interview what the Energy employee's work experience was like, what did they encounter, what did they do. We use it to try to develop a little bit of a work history about that person that the health physicist who's doing the dose reconstruction can use.

I met with a lady yesterday afternoon who provided public comment, and they're concerned that their -- their father was a -- a maintenance worker who, you know, was heavily involved in all the maintenance activities of Building 55, the Pilot plant, lived there almost -- you know, 24/7 kind of a thing -- and did things in his usual routines that probably gave him higher exposures. We want to capture that kind of information if we can in an interview and see it applied and addressed in our dose reconstructions. I'm not going to tell you it happens like that all the time, but that's what we're striving for.

So there's also a closeout interview that occurs once the dose reconstruction report has been drafted and delivered to the claimants, and we ask again at that point in time do you have any additional information that would help us do a better job of estimating the exposure for your -- for this particular individual worker. So yes, there are these activities, but I would not -- I would say that -- that they're a best effort, a best attempt, but worker outreach does afford a different type of

collection of information because it allows people to bounce their thoughts off of each other and say don't you recall what happened there? Oh, yeah. In a survivor situation you don't get that kind of a dynamic, and if you're interviewing the Energy employee you have that also lost there. You don't have that dynamic.

DR. ZIEMER: Thank you. Jim.

DR. MELIUS: Yeah, I -- actually a comment, then a separate question, but I think we certainly have found such meetings to be useful. I think a recent one at Chapman Valve, which actually followed up an earlier meeting on the site profile -- around the time the site profile originally came out, but a follow-up meeting recently, I think with NIOSH, our contractor and actually the chair of our working group, John Poston, was there and some people came forward who hadn't been -- come forward before and were able to provide very significant useful information on the facility. So I'd strongly urge that that -- that get done in this case and I -- particularly given some of the questions that have been raised here. My question for -- for you, Brant, is -- if you

could explain a little bit more about the basis for the radon estimates.

DR. ULSH: Okay, sure. I actually may not be the best person, that might be Tom Tomes again -- Tom, if you could perhaps speak to that.

DR. WADE: Tom, could you identify yourself and your affiliation and...

MR. TOMES: Tom Tomes, I'm with NIOSH.

DR. WADE: And then speak slowly.

MR. TOMES: All right. You're wanting some clarification on how we reconstruct the radon doses, is that --

DR. MELIUS: Yeah, I'm -- I'm...

MR. TOMES: Okay. Well, I'm not an authority on the Technical Information Bulletin that was developed. I've -- I've read it several times and I was not involved with developing it, so I'm not the best person to speak on -- on that particular issue. But I can summarize what's in it. It -- it's -- contains evaluation of radon studies that have been done by various phosphate plants --

DR. MELIUS: Uh-huh.

MR. TOMES: -- and including mining, which -- phosphates, which was not part of the

particular process that we associated with -- with Blockson. And that study -- it's TIB-43 and I -- I -- like I say, I cannot -- I cannot be an authority on the development of that. However, that does recommend various results and those -- the results were a recommendation for (unintelligible) radon to phosphate plants. And so we have taken that result and applied it to Blockson. The radon -- the results are -- there is a multitude of results in that document, various radon levels, and we applied the distribution to Blockson.

DR. MELIUS: Okay. Thanks for trying, but --

MR. GRIFFON: Just to -- just to follow up on that question, though, I think it's been raised by some of the commenters, too. How did you determine whether this facility was similar enough in size, in ventilation, to be -- for TIB-43 to be applicable to this facility, Blockson?

MR. TOMES: Well, base -- the -- the reasoning behind the radon at -- that we're assigning at Blockson is basically not that the radon was in that building, because the -- the radium was not diverted to Building 55. So we're assuming

that the radium -- the rad-- there was radon on the site, and we've taken this study and used the results, because we cannot say with confidence that radon did not migrate into that building from other facilities on-site.

DR. MELIUS: So -- so is -- is the issue of sort of the possibility for migration the reason for the assigning the 50th percentile?

MR. TOMES: Well, the -- I -- I took the -- actually I took the recommendation for a best estimate.

DR. MELIUS: Okay. Okay.

DR. ZIEMER: Well, okay, clarify then -- was the separation of the uranium from the stream done prior to the uranium arriving in Building 55?

MR. TOMES: Yes, it was.

DR. ZIEMER: Okay, so there -- there's no phosphate in Building 55, per se.

MR. TOMES: Right, the phosphogypsum is --

DR. ZIEMER: So the only --

MR. TOMES: -- separated --

DR. ZIEMER: -- radium -- if you're doing workers in Building 55 -- not under an SEC, just the regular dose reconstruction -- you're

only talking about -- well, are you even talking about natural radium -- or natural radon in the building? Is that a -- is that a component of this? Because that -- that's there anyway.

MR. ELLIOTT: I think what we're talking about here is ambient radon that found its way inside Building 55, not part of the process stream. It's on-site. These are huge piles --

DR. ZIEMER: Because of the piles of --

MR. ELLIOTT: -- huge piles of rock --

DR. ZIEMER: Okay.

MR. ELLIOTT: -- that are being processed. They're sitting there all around these different buildings. Yes, we understand that Florida's buildings may have open windows where Illinois's buildings are typically closed in (unintelligible) --

DR. ZIEMER: And that -- that radon would have been there even if they weren't doing the uranium work, 'cause they were still doing the phosphate --

MR. ELLIOTT: That's correct. That's correct. That's the commercial radiation exposure.

DR. ZIEMER: Okay. But -- but what you're

saying, though, is that nonetheless, we will add that by some means --

MR. ELLIOTT: We think it's --

DR. ZIEMER: -- to this since it -- in a sense, it's part of the process.

MR. ELLIOTT: -- beneficial to the claimants that we do include this.

DR. MELIUS: Yeah, my -- my problem is in both the example dose reconstruction and in the Technical Basis Document that's not well-explained. I think it's probably back in that TIB-0043, whatever it is that's the -- the generic document for -- for that.

MR. ELLIOTT: Well, we didn't -- Brant didn't walk you through the dose reconstruction examples and so perhaps that's part of the why it's not clearer. If we'd explained those individually, you might have --

DR. MELIUS: Cer-- certainly it's -- it's --

MR. ELLIOTT: -- been able to --

DR. MELIUS: -- as it's written, it's not clear.

MR. ELLIOTT: Understood. Understood.

DR. MELIUS: So I -- but --

MR. ELLIOTT: The studies that Tom is referring

to are a collection of studies that come out of the Bureau of Mines and NIOSH has done some work on these -- these Florida phosphate facilities, and so that's where we get our data from.

DR. MELIUS: I -- I have a follow-up question, I -- John Mauro is here? Yeah, he just happened to be standing up. Is that -- is that TIB is one of the ones on our review list or not, TIB -- I think it's TIB-0043, yeah.

DR. MAURO: The site profile review? Is that what you're -- I'm sorry, I (unintelligible) --

DR. ZIEMER: No, no, this is the radon -- the TIB on --

DR. MAURO: No, it's not.

DR. MELIUS: Okay.

DR. MAURO: We checked into that.

DR. ZIEMER: Thank you. Yes, Gen Roessler.

DR. ROESSLER: I may have one additional radon question, and I don't think it's been clear. And while we have the -- I think the person who brought this up in the audience, I would like a more specific answer on it. I think -- and I'm not sure who it was, was talking about the difference in the ventilation and the climate

and -- and the building construction and that sort of thing between Florida and here in Illinois. And I don't -- I didn't hear anybody specifically say that they took that into consideration when they used the data from the Florida process and extrapolated to -- to here in Illinois. And I just thought while we have the person here I assumed when they asked the question, I'd like more clarification on it.

MR. TOMES: Well, the dat-- the data that was used in the old TIB was indoor data, primarily. There may have been a few outside results 'cause I read through all the results that was put in that data, and it was primarily indoor data.

DR. ROESSLER: Yeah, but even so, if it's indoor air, if -- and we know this from homes with radon. If you have a lot of ventilation, then your levels are going to be a lot lower. And so I think there has to be some sort of consideration for the different type of building and -- and the ventilation and perhaps the way the building is constructed.

DR. ZIEMER: Well, obviously some points of confusion here on how that radon document was

used. But what we're talking I think about piles of excess or -- what would be the proper term -- spent phosphate that contains residual radium, I believe, that is emitting radon into the air. So presumably you have a higher source of radon in the vicinity of the plant and the plants -- the buildings are having some air intakes and so it's a question of --

DR. ROESSLER: Then it might be just the opposite.

DR. ZIEMER: Well, there's --

DR. ROESSLER: Yeah, I'm beginning to understand that --

DR. ZIEMER: -- also data to show you don't have to be very far from a pretty big source of radon before you can't even see it again, so...

DR. ROESSLER: Yeah, but if you're talking then about a Florida situation, then those levels -- if there was more ventilation -- inside the building might have been higher and it might be the -- what was I think a misunderstanding -- more claimant-friendly. Is that --

DR. ULSH: If I could perhaps take a crack at this, Dr. Roessler -- I don't know, maybe I won't be any more successful than I have

already, but you have to keep in mind the way that we applied this at Blockson. The rock -- the phosphate rock came onto the site and the streams were split. The part of the phosphate rock stream that contained the radium that generates the radon did not go into Building 55. It did not. But in order to bound the radon doses, we treated it as if it did. So if you're asking if the radon estimate that we've provided -- is that realistic, the answer's probably no; it's probably way high because --

DR. ZIEMER: Are you assuming the phosphate is in the building?

DR. ULSH: The numbers that we used in TIB-43 are numbers from phosphate mills in Florida where the phosphate material is inside the building. That's what I'm trying to say is that this is a bounding estimate and --

DR. ZIEMER: That would greatly overestimate the radon.

DR. ROESSLER: Thank you, that --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ULSH: Oh, here?

UNIDENTIFIED: (Off microphone) Yes.

DR. ULSH: Oh, you caught me. This represents --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ULSH: This represents my attempt to say that Blockson made fertilizer -- which they didn't do, that's why I didn't say it in the presentation -- because phosphate rock is frequently used in the production of fertilizers. However, that did not occur at Blockson, so that graphic is -- you caught me.

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ULSH: You know, it never occurred to me that it resembles that. If it had, I probably would have picked something different, too, so -- no, it's supposed to be a --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ULSH: -- agricultural.

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Okay.

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: It prob-- it just goes into the air. That's what normally happens. Michael, did you have a question?

MR. LAPINE: Yes, I do have something to add. I just want to bring it back to a little bit of basics here and let's remember what this is all about. The EEOICPA was designed to help classes of workers who fell ill working during the time of the Cold War. Why do we have the SEC? It's for groups of people who dose reconstruction can't be done on an individual basis. With all due respect, Mr. (sic) Ulsh, you have estimated the engineering controls. You have no dust measurements. You have estimated the monitoring. You based that on five workers. You have estimated the hours worked at 40 hours per week. Who works 40 hours per week, then or now? You've estimated the production. You have no records after 1955 of how much was produced. You estimated radon exposure based on a facility in Florida? As I see it, you guys have one hard-core fact. It is the urinalysis of 25 workers. That's it. We have 296 claimants. What is their one

common denominator? They all worked at Blockson. What's their other common denominator? They all fell ill. Let's bring it back to basics. I'd like Mr. Miller to add something to this, as well. Thank you.

DR. ZIEMER: Thank you.

MR. MILLER: Richard Miller from GAP. I just have a couple of questions, and -- and I appreciate that neither Tom nor Brant are all that familiar with OTIB-43. Who wrote OTIB-43?

DR. ULSH: The ORAU team wrote OTIB-43.

MR. MILLER: Who on ORAU wrote it?

DR. ULSH: I would have to get back to Ed -- Tom, do you have a copy of it?

MR. MILLER: Okay, and -- and -- and then behind that is who reviewed it in NIOSH that has familiarity with the data that went into it, is sort of the next question, so if someone could answer those to start with.

MR. TOMES: I have the list of the subject experts here, on the -- on the document -- Gary Dare, Roger Gard and Michaeline Rodriguez, and I was not the reviewer of this in OCAS so I can -- I cannot answer that question.

MR. MILLER: You don't -- nobody knows who the

reviewer of this was? In other words, if this is a NIOSH document that is owned by the agency, who is the owner on -- on this? The document shows that it's signed by Elise Thomas, Kate Kimpan and Jim Neton. Now who actually did the review and owns it? 'Cause we need to hear from NIOSH on TIB-43 'cause I think this is really at the crux of a lot of the questions that we're grap-- grappling with here. Does -- can anyone answer that? Who owns this document in NIOSH? Who is the person who says Jim Neton, put your John Hancock on it?

DR. ZIEMER: We may have to track that down. Did you have a comment, Richard?

MR. MILLER: Yeah, I mean I -- this -- this gets at it, though, because -- and I appreciate the difficulty you're facing presenting something that you don't have intimate familiarity with.

The first question I guess I have is when I looked at TIB-43, TIB-43 sought to break out a variety of radon datapoints, some were from the underground rock tunnels which were excluded because they're not comparable to a phosphate

plant. And then there were a number of other datapoints that were included. These were then put into a distribution and then a geometric mean was taken of that, and that was what was applied here.

Now the question that I had posed yesterday and would pose again is why is it that, for example, the upper 95th percentile -- which is normally what you'd do with coworker models, assuming this data is representative, which we haven't established yet -- why is it the 95th percentile wouldn't have been used as your bounding dose estimate?

DR. ULSH: Okay. First of all, we're not representing -- we're not -- it's not our position that this is representative. It's our position that this is bounding. And the reason that we're making -- we're taking that position because this -- the radon data was for facilities that were similar to Blockson and had the same source material; that is, phosphate rock from Florida.

Now with regards to the 95th percentile, certainly that would be an overestimate. But when you consider the fact that the ra-- the

radon-generating material never even went into Building 55, we considered that the 50th percentile was an appropriate value to use -- the geometric mean.

MR. MILLER: Okay, fine. Now let's go to the second question which Pete Turcic raised, which was when Blockson Chemical was initially listed, it was Building 55 only, and then there were -- and there was a series of *Federal Register* notices that were made about Blockson Chemical over the years. I believe there were two supplements to that in terms of defining what constituted covered employment and covered activities at the facility.

UNIDENTIFIED: (Off microphone) (Unintelligible)

MR. MILLER: Bear with me for a second.

UNIDENTIFIED: (Off microphone) (Unintelligible)

MR. MILLER: Yeah, bear with me for a second. I just want to get to it for a second and -- and delighted to hear your answer to it. My understanding is -- from having read the contract between Atomic Energy Commission and Blockson -- that Blockson purchased uranium at

around $10 bucks a pound -- Blockson sold, rather, uranium at about $10 bucks a pound to the government. The government didn't pay for a phase of the process; they paid for a product out the end of the door -- off the -- off the gate.

My understanding of how this plant and the process worked was that you had the rock phosphate come in. It was dissolved I believe in sulfuric acid. It went through a precipitating process. At a certain point, the radium precipitated out of the stream and then once it got through several precipitating processes, it wound up getting to Building 55 where there probably wasn't much radium left in there anymore given the precipitating process. The question was, given that this is not a side stream and that all dose has to be counted -- all dose to workers has to be counted in the course of this, including NARM, or nat-- you know, some sort of naturally occurring radioactive materials here, the question is, how can you exclude or are you excluding those who were involved in the pestle-grinding? They had these big grinders that ground up the rock,

and then you had another group of people that loaded it with front-loaders and then they dumped them into vats, and then once they're in the vats they added the sulfuric acid, and then they neutralized the acid and then they precipitated out the sludges. Okay. All of those phases of the production process took place in some kind of building or maybe they took place out -- out of doors, I don't know. How come -- first of all, is that covered activity under -- for purposes of dose reconstruction?

Second question, is that covered activity appropriately bounded here? And if it's appropriately bounded, how do you know it's appropriately bounded with respect to the facilities in Florida?

DR. ULSH: Okay. The answer to your first question, Mr. Miller, if I could perhaps take a stab at that. As I understand it, and I'll let Pete correct me if I misspeak, since placing someone in Building 55 or somewhere else on the Blockson site.

They don't make an effort to do that. In other words, anyone who works at Blockson is eligible

to apply -- put in a claim for compensation in this program.

Pete, do you want to add to that?

MR. TURCIC: Yeah, I think there's some confusion going on here, confusing the difference between what is the covered facility versus what we're talking about here is who is a covered employee, you know, who gets in that door.

What -- the covered facility is Building 55, the Pilot plant, and any of the activities that were involved in the phosphate trail in the main production line that was involved in the process that ended up dumping the uranium out -- you know, outside. So the covered facility are parts of that phosphate trail plus Building 55 and the Pilot plant.

From a standpoint of then administering the program, we found that there was no way we could identify only those people -- you know, identify the people that actually worked in Building 55 or in the functions that -- there were functions added to the main product stream in order to subtract it out. Those added functions are in fact part of the covered

employment.
So we have two things here. We have the covered facility. But then how do we get to who is covered in those facilities; and for all intents and purposes, it's everybody in Blockson because we are unable to make those separations.
DR. ULSH: Okay. Now with regard to the second question that you asked, how do we know that the activities that occurred in Building 55 are bounding for the other things that Pete just mentioned. You have to recall, Richard, that what they were doing in Building 55 was concentrating uranium there, and so the concentration of the uranium that they handled in Building 55 was higher than any of the steps prior. And the workers had direct contact with the yellowcake. Therefore the -- it's normal -- it's reasonable to assume that the -- that the activities that occurred in Building 55 with more concentrated uranium are bounding -- I mean in a general sense.
MR. MILLER: Bounding except for radon, because radon was already removed by that stage in the process.

DR. ULSH: That is correct.
MR. MILLER: And because of that, the -- the -- the production process -- I guess the question that I'm trying to still get clarity on, I think Dr. Ziemer was kind of zoning in on this better maybe than I did or -- when he spoke earlier. My question is, are you assuming -- when you're saying that you can reconstruct dose with sufficient accuracy -- that you can reconstruct the dose with sufficient accuracy for the ball grinder, the loader, the tank -- the guys who dump the stuff in the tank, the people who shoveled out the sludge which had all of the precipitate that came out in the various stages as it moved through the process prior to it ever getting to Building 55? Are you saying you can bound it for them as well, and if so, what is your basis for concluding that you can bound it and -- and -- in terms of your comparison with these Florida facilities?
DR. ULSH: Okay, I -- I think you're perhaps combining a couple of different issues. The ans-- the short answer to your question is yes, we are saying that the dose reconstructions that we do that consider the activities in

Building 55 bound any dose from any activity that occurred at the Blockson Chemical site. I think that might answer your question. Now --

MR. MILLER: Except for radon.

DR. ULSH: Now, in terms of radon, we are using numbers from similar facilities in Florida where the radon-generating material was actually inside the building, which is not the case here. That's -- the radon-generating material at Blockson is outside the building and not inside --

MR. MILLER: But -- but it -- but was it in another building or was it just all handled out in the snow and the ice and the sleet?

DR. ULSH: I can't answer that. It was somewhere outside of the covered facility --

MR. MILLER: But --

DR. ULSH: -- on the Blockson site.

MR. MILLER: -- but you see, this notion that it's outside the covered facility is creating a bit of -- I mean Pete just explained, I think very clearly, that the covered activities go well beyond Building 55 and so we have to analyze what took place with the folks who ground -- I mean most of the radium is going to

be in that rock or when you precipitate it out in those first stages. And so the question is how -- I mean -- I'm through. I -- I think I made the point.

DR. ZIEMER: We understand the question and --

MR. MILLER: Yeah.

DR. ZIEMER: Okay. Board members, any other comments or questions?

(No responses)

You have -- you have several possible actions before you -- actions or inactions. One action would be a motion to support the NIOSH review in -- in terms of -- which in effect is denial of an SEC. Another action would be to recommend an SEC. Another possible action would be to -- to postpone action and -- and look for some follow-up on some open -- what appear to be some open questions, or even to engage the Board's contractor for assistance would be another possible sub-action. What is your pleasure?

Dr. Melius, do you --

DR. MELIUS: Yeah --

DR. ZIEMER: -- have a comment or --

DR. MELIUS: Well, let me --

DR. ZIEMER: -- do you wish to make a motion?

DR. MELIUS: No, I don't want to make a motion, but let me say what I'm thinking about and get some reactions from the Board. First of all, I -- I'm -- I would propose that we postpone action on this. I think for -- two things I -- several reasons. One is I think it would be helpful, certainly to the credibility of the -- of the process and so forth, that NIOSH do more outreach and -- and hold a meeting as been -- as has been suggested and I think Larry agreed to it. I'm not -- don't want to commit you, but I think there -- there was a willingness to do that, so I think it -- that -- that would be helpful.

Meanwhile, I think we need -- certainly need clarification on this production issue. My neighbor here, Bob Presley, looked up the USA Today article on the Internet while we were talking and it did -- did say two million pounds or something like that of uranium. Now again, what the basis for that is, I think we need to know and get a better handle on. And I think that's something NIOSH should do and -- and can do and so forth.

I would also like to get clarification on this radon issue and exactly what's being done there, and I would I think propose that we have SC&A foc-- do an evaluation focused on that specific issue and re-- report back to the Board. I'm not sure if there were other issues that other members of the Board have that they'd like sort of technical clarification on, but I guess I would be proposing a sort of a focused review by SC&A, focusing on that particul-- at least on that particular issue -- with the idea that that could be reported back in a timely and fairly short -- short period of time.

DR. ZIEMER: Dr. Melius, I guess at this point you're -- you're raising a flag here to see if anyone salutes -- as opposed to making a formal motion or what might be included in a motion --

DR. MELIUS: Yeah.

DR. ZIEMER: -- in addition to the items you raise. I think you've identified or clarified several points that have been the focus of this discussion -- the worker outreach point, the issue of the -- basically the source term --

DR. MELIUS: Right.

DR. ZIEMER: -- the production level, and then the use of the radon data.

DR. MELIUS: Uh-huh.

DR. ZIEMER: Wanda Munn.

MS. MUNN: As a matter of simple clarification, Dr. Melius's suggestions are well taken. Particularly of importance I think is that the SC&A, if we do ask them to do so, focus very clearly on this single point and not go astray into other portions of what additional minutiae might impact in some small way what's going on, because this appears to be a large enough issue that it could bear their scrutiny on its own.

DR. ZIEMER: Clearly the first two points, the worker outreach, the ball would be in NIOSH's court on that. The production issue, hopefully we can get the source of the USA Today's data and NIOSH's and find out perhaps -- I don't know if Mr. Lapine can help us on that, but if we can -- I guess we know now where the USA Today data comes from. If Peter Eisler's information can be made available, if he can reveal his secret sources to us, perhaps we can get clarity on that. And then the issue of the radon, we have the TIB. In essence I think you

would be asking for a TIB review, and then how it was applied to this particular facility.

DR. MELIUS: Correct, and -- and I think we'd ask them to look both how it was -- well, I think it's really how it was applied in the SEC evaluation would I think sort of cover -- cover it.

DR. ZIEMER: Other comments, Board members?

MR. GRIFFON: Just a -- yeah, I don't disagree with the -- the notion of a targeted review. I -- I think it might be worthwhile for at least the Board to consider some of the other issues, though. I think we -- we probably need SC&A's assistance on the radon, but I want to point out that there's -- you know, there's no external data, there's no -- there -- there is urinalysis data, but we -- we should look at the representativeness issue. I'm not sure everybody's had a chance to really mull over that data. I know I haven't. I looked in some of the example DRs and there's -- there's some different value applied. I think it's based on maximizing principles in one case and different values for other cases.

Also on the external, I think there's an

important point. We've been talking about this 40-hour issue, which seems very -- at least NIOSH is proposing that as a sort of claimant-favorable option, but I think we need to pay attention to the -- the one-foot part of that equation because if you look at figure five in the TBD, the beta doses drop off from 150 millirem per hour on contact to two millirem per hour at one foot, so I think -- you know, it -- it's almost more claimant favorable to assume one hour of direct handling than 40 hours at one foot -- it is more claimant favorable. So there -- there's some details in there that I think I need to look at. I'm not sure we need to involve the contractor on all of those, but --

DR. ZIEMER: In fact, if we were to pass a motion of the type described, I -- I think the -- the Chair would probably want to assign a workgroup to track these between now and our next meeting and -- and to address any related issues. I -- I'm wondering if -- if it would be helpful for the potential mover of the motion to have some break time to prepare some wording, and we are close to our -- our break.

And Jim, if you're willing to --

DR. MELIUS: Oh, I can -- I'm willing to take a stab at it right now.

DR. ZIEMER: Right now, okay.

DR. MELIUS: Yeah.

MR. STEPHAN: Chairman, can we have just one final comment before the motion comes on the floor?

DR. ZIEMER: Sure.

MR. STEPHAN: I just have to make sure, not to belabor the point, I think Mr. Griffon -- or Dr. Griffon?

MR. GRIFFON: Mister.

MR. STEPHAN: -- Mr. Griffon and the doctor have hit on this point, but I want to clarify the -- the Senator's position. The Senator's position is not to ask SC&A to review radon only. The Senator's position is to ask SC&A -- and it's just his request; certainly -- obviously you don't have to do it, but his request is to ask them to review the entire process, so that is the external and internal, whether or not it is reasonable; the source term -- I believe it was mentioned earlier and I'm not sure that I understand this correctly,

but that we only have data up until 1955 about the volume of what was produced. Is that correct? And so -- so that is one thing that we would want to take a look at and how that is factored in, if we can, 'cause that goes to the issue of how -- how much was there. I just want to make sure I have it all here.

Basically, you know, his request is a full review of the SEC evaluation. We just -- we just think that is fair. You know, I -- I don't think the Senator would think that the rest of those issues are minutiae, so however they are addressed, hopefully they will be addressed -- it is our request that they are addressed by the audit contractor. Thank you.

MR. GRIFFON: The oth-- the other --

DR. ZIEMER: Let me -- let me respond to that, and I understand the statement that you've made. We generally put some boun-- bounds on our auditor in terms of tasking them. It's -- it's not simply an open thing to do whatever you wish.

The other part of it is that we have -- we have to be careful that we don't task our auditor to do work that NIOSH should be doing. For

example, the identification of the correct source term I think rightfully is NIOSH's task. And you know, we would want to look over the shoulder and say have they used the right sources, but I, for example, would not want to task our auditor with the job of finding that information when rightfully it's -- it's the agency's job to do that. We -- we are auditing what they do, and if a problem is identified and there appears to be a discrepancy on a point like that, then they need to go back and -- and convince us that either they have the correct information or if the USA Today's -- and -- and certainly if necessary we can have our auditor look at the sources and say, you know, who's reliable and so on. So I don't -- I don't think we'll tie their hands in saying you can't look at anything else, but we -- we do want to keep the scope somewhat focused, also recognizing that concurrently we have a whole lot of additional SECs that are not unlike this, and there are limits to what we can do in terms of our auditor's own resources and time.

Mark.

MR. GRIFFON: That's fine, that's (unintelligible).

DR. ZIEMER: Yeah. But -- but I think if we have a workgroup that's tracking this and if we find other issues, we do have the capability of tasking the -- the contractor to do additional tasks. And Lew, I think that's been our practice and we can certainly do that as we proceed, so -- we will be sensitive to those other issues, as well.

So the Chair recognizes Dr. Melius for the purposes of -- of making a motion.

DR. MELIUS: Yeah. Yeah. Yeah, I would move that we postpone consideration of this SE-- of our review of this SEC evaluation pending, number one, that NIOSH conduct further activity to attempt to clarify the discrepanc-- important discrepancy in production figures related to this facility and the time period in question; number two, that until NIOSH has held a meeting with people near -- near the facility to obtain input from people, the representatives, claimants and people that have been involved in the SEC petition; and number three, that the Board establish a workgroup

that would work with our contractor -- task our contractor to conduct a focused review on -- on specific issues related to the SEC evaluation, including but not necessarily limited to the radon issue that we have discussed here today.

DR. ZIEMER: Thank you. You've heard the motion. Is there a second?

MR. GIBSON: (Off microphone) (Unintelligible)

DR. ZIEMER: And seconded by Mr. Gibson. Now the motion is open for discussion.

Wanda, you're chuckling.

MS. MUNN: No.

DR. ZIEMER: Wanda wanted to second the motion.

MS. MUNN: No.

DR. ZIEMER: She had already indicated support for it.

MS. MUNN: No, that's -- that's quite all right. I have no comments.

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

(No responses)

Is the motion sufficiently clear that the Chair doesn't have to repeat it?

DR. MELIUS: Or Ray.

DR. ZIEMER: Okay. Well, I -- I will reiterate

the one sort of slight change. It was in point three that we established the workgroup and, with the help of the contractor, track appropriate issues including but not limited to the radon issue. So it opens the door for other issues to -- to be addressed.

That is the motion. Let us vote. All in favor of the motion, raise your right hand. The Chair is also voting. I was told that, for the record, I needed to record my vote.

I see all ayes. Any no's that I haven't detected?

(No responses)

And no abstentions. The motion carries. Thank you very much. We're going to take a break.

DR. WADE: Well, could we do the workgroup quickly? I mean it --

DR. ZIEMER: Oh, appoint -- appoint the workgroup.

DR. WADE: While it's right here.

DR. ZIEMER: We can do that. As you know, the Chair usually likes to get volunteers for workgroups. We like three, or possibly four individuals who are willing to participate in this workgroup.

MS. MUNN: (Off microphone) (Unintelligible)
DR. ZIEMER: Wanda Munn.
DR. MELIUS: In that case...
MR. GRIFFON: What are you guys doing, (unintelligible).
DR. ZIEMER: These two love to work together.
DR. ROESSLER: It's called balance.
DR. MELIUS: I missed you on Hanford.
DR. ZIEMER: Are there any others?
DR. WADE: It can be two.
MR. GIBSON: (Off microphone) (Unintelligible)
DR. ZIEMER: Okay, Mike Gibson. And --
MR. GRIFFON: You want to stay at three or --
DR. ZIEMER: -- I'll take one more. Okay, Gen Roessler.
Dr. Roessler, you haven't chaired any workgroups lately, have you?
DR. ROESSLER: I -- if this is to be done by February, I couldn't take on the Chairmanship, I don't think, but I could be on it.
DR. ZIEMER: You could be on it, okay.
DR. ROESSLER: Yeah.
DR. ZIEMER: Let's see, Wanda, are you chairing anything? I know that Jim is and I know that Mike is.

MS. MUNN: No, I'm not.
DR. ZIEMER: Would you chair?
MS. MUNN: Sure.
DR. ZIEMER: Okay, Wanda Munn. And the Chair will be responsible for establishing times and so on. Jim?
DR. MELIUS: Yeah, I have one further request that's -- came up here and it's come up in the past, also, and that's the whole issue of using data from other facilities as part of either coworker models or other models on source terms and so forth. I really think we need to sort of re-evaluate that and at least re-discuss that at a -- at a Board meeting. There's certainly some --
DR. ZIEMER: This may in fact be in that category of an overarching or (unintelligible) --
DR. MELIUS: Yeah, overarching technical issue -- well, it's also a -- there's a legal aspect to this because of the wording in -- in the Act and so forth and I really think we need to pay a little bit -- little attention to -- we haven't talked about it in a while and it --
DR. ZIEMER: Basically this is a big-picture

policy issue of using coworker data.

DR. MELIUS: Yeah.

DR. ZIEMER: It's not confined to this site, has a wider-reaching -- actually I think Mr. Stephan mentioned that, as well --

DR. MELIUS: Yeah.

DR. ZIEMER: -- and that's one, when we talk about workgroups, we can --

DR. MELIUS: And even -- I would like to have some open discussion at our next Board meeting on this --

DR. ZIEMER: We'll put it on --

DR. WADE: We can put it on the agenda.

DR. ZIEMER: Yeah.

DR. WADE: For my own edification, is there any sense of timing conveyed with this motion or the workgroup? Are we aiming at the February meeting? Are we standing silent?

DR. ZIEMER: Well, maybe Larry can address the issue of -- I mean --

DR. WADE: An outreach meeting.

DR. ZIEMER: -- we're -- we're recommending the worker outreach program and, you know, what are we talking about in terms of time-wise on that, and also --

MR. ELLIOTT: Well, I'd like to get it done as soon as possible. Can I have it done before the February meeting? I don't know; we'll have to look into that. We need to talk with the right people and make sure we get it all scheduled and coordinated.

What I came to the mike was to provide clarification. You're not talking about coworker data. When we use the term "coworker," that has a specific definition. Okay? What you're talking about is using data from similar operations or processes not at this particular facility.

DR. MELIUS: Correct.

MR. ELLIOTT: Okay. Coworker data, in our parlance, means we've taken a distribution of the workers' exposure data and we're applying that to situations and people who do not have monitoring data, so there's a subtle difference there, but when you schedule this for your next Board meeting, we want to be prepared to talk about data used across facilities for similar operations.

DR. MELIUS: Correct.

DR. ZIEMER: Thank you.

DR. WADE: Can -- can I assume then that -- as to the timing of this, February is -- is desirable, but certainly May is a target for having this issue --

DR. MELIUS: Yeah --

DR. ZIEMER: Well, we certainly want an update in February and to --

DR. MELIUS: Yeah.

DR. ZIEMER: -- to be as far along as we can. Obviously we don't want to drag the decision on Blockson on and on and on, so we -- we need to move forward.

Michael?

MR. GIBSON: Yeah. Larry, this question's to you. On the issue of coworker data, I know there's the issue of using data from one plant to another plant on workers, but there's also the issue of coworker data at people at the same site on the same job when the contractor would maybe put a breathing air lapel monitor on one out of every four workers, and it's the rad tech who stands over here in the corner, and the rest of us are over here doing the work.

MR. ELLIOTT: And certainly that is a coworker

data issue. That's how we apply -- you -- you're bringing up an issue about how we apply coworker data for people who weren't monitored, but that's different than what you were talking about here a moment ago.

MR. GIBSON: I understand, but I -- I mean I brought that question up before and I bring it up again. I'd like an answer to that.

DR. MELIUS: But -- but -- I mean -- my understanding -- excuse me for interrupting, Mike, but is that that is -- there's a number of procedures that address that and my recollection is that those were some of the procedures that SC&A was reviewing. And so I thought we were covering that -- that specific issue, the co--

DR. ZIEMER: In a different TIB, I believe.

DR. MELIUS: In a different TIB, correct, yeah, but that's -- so --

DR. ZIEMER: But that -- that issue is still --

DR. MELIUS: Yeah, so what we're --

DR. ZIEMER: -- to be addressed later.

DR. MELIUS: -- I guess what I was saying is we weren't -- the -- sort of ignoring that issue, but it was -- the facility to facility issue is

where...

DR. ZIEMER: Okay, thank you. Yes, Brad Clawson.

MR. CLAWSON: I -- I just have one issue and that is, you know, we're -- we're getting so many -- we're getting on so many workgroups, and one of the problems that I've seen here lately is when the Chair is not able to be able to meet at it, it's hard to be able to address. Would it be beneficial for us to be able to have a co-chair so that -- so that we can proceed on with these? I know that in several of our groups it's been quite difficult and I just think it'd be -- if we appointed a co-chair along with the chair so that we'd be able to proceed on further and faster.

DR. WADE: I think we can take that up for all the workgroups tomorrow.

DR. ZIEMER: Sure. Good -- good suggestion. Okay, let's take a 15-minute break and then we'll resume.

DR. MELIUS: I want to co-chair with Wanda.

(Whereupon, a recess was taken from 3:00 p.m. to 3:30 p.m.)

ALLIED CHEMICAL CORP. SEC PETITION
MR. STUART HINNEFELD, NIOSH/OCAS

DR. ZIEMER: Board members, we're ready to now turn our attention to the SEC petition for Allied Chemical Corporation, and Stuart Hinnefeld is going to present the evaluation report from NIOSH for Allied. Stu?

DR. WADE: As Stu is miking up, I would also ask, if there are petitioners or representatives for Allied Chemical, that they identify themselves.

MR. KLINGHAMMER:* Yes, my name is Billy Klinghammer. I'm the local President -- out of Metropolis, Illinois, Local 7-669.

DR. ZIEMER: Okay. Thank you, Billy.

DR. WADE: And we'll give you an opportunity to speak, Billy.

DR. ZIEMER: After he speaks, if you wish, we'll turn the mike to you.

DR. WADE: Anyone else?

(No responses)

Okay. Stu?

MR. HINNEFELD: (Off microphone) Okay. Thank you. I'm here to discuss the (unintelligible) --

(Pause)

DR. ZIEMER: Are we on?

(Pause)

MR. HINNEFELD: I think I might be on now. Can -- can you hear me? Okay.

I'm here to discuss our petition evaluation report for the SEC -- class for SEC petition associated with Allied Chemical Corporation in Metropolis. Allied Chemical is a uranium conversion plant. It's located in Metropolis, Illinois. It converts uranium to -- largely uranium hexafluoride for use elsewhere.

It had an arrangement with the AEC for a period of time to produce uranium hexafluoride for I believe the Paducah Gaseous Diffusion Plant, for sure. Maybe for others, but certainly Paducah. And so they had a relation-- relationship with the AEC during that time and therefore is considered an Atomic Weapons Employer for that period of time.

This again is an 83.14 petition. We've evaluated the potential exposures there and find that we have an issue with providing dose reconstruction with sufficient accuracy for dose reconstruction for all members of the

class, and so we've identified a particular claimant, a representative claimant, that -- whose dose reconstruction we felt we couldn't do appropriately, notified that person of that and then we evaluated the class of similar workers who may be in a similar situation.

I just went through these a little -- a little bit ago. Our two-pronged test is to determine if it's feasible to estimate the radiation doses with sufficient accuracy. And if it is not feasible, then we make a judgment about whether there's a reasonable likelihood that the radiation exposures at the plant may have endangered the health of the members of the class.

The Allied Chemical Plant's a uranium conversion plant. It converted uranium ore concentrates -- and probably other feed materials, as well -- to UF-6. This was then sent to enrichment facilities.

Covered employment period begins in 1959 when the plant opened, and it continues until 1976, which appears to be the end of the relationship with AEC. Operation of the plant for commercial purposes continued past our covered

employment period and, if I'm not mistaken, still continues today. The plant still operates today for commercial purposes. Uranium ore, ore concentrates, and uranium recovered from site operations -- you know, the things you recover from the waste streams and put back into the production stream -- were put through a series of chemical reactions that -- of -- I outlined briefly there, ultimately resulting in a UF-6 product. The SEC evaluation report contains additional information about the specifics of the processes and what those actual chemical processes were.

The UF-6 then -- the product is loaded into cylinders, the big UF-6 cylinders -- or at least most of them are big -- that we're familiar with for -- those are suitable for transport to other facilities.

It appears that personnel were routinely monitored for external exposure, and we do have monitoring results. The plant there cooperates with us and provides exposure histories for claimants when we go -- when we request them. And personnel were monitored for internal

exposure for uranium by in vivo and in vitro, you know, urinalysis bioassay. Those results are available, though the in vivo monitoring began after 1976. There's actually no in vivo monitoring during the -- the period of -- the covered period.

Now there are no monitoring data available in the exposure records for exposures to non-uranium radionuclides that would have been present -- would have come in in the uranium ore and ore concentrates, and then would have been -- the relative states of equilibrium and disequilibrium would have been disturbed as the -- as the materials went through the conversion processes.

And I say here there is no particular information available about the relative abundance of non-uranium radionuclides and about how that relative abundance may have changed in various parts of the plant.

We do have available to us some limited air monitoring data for years after the covered period. These indica-- these data indicate the airborne concentrations -- concentrations tended to decrease over time for this period

that we have data for, so since there is a -- since it's a -- not a constant concentration, since it tends -- it has declined as time goes on, which is probably generally true of the industry in general that airborne concentrations tended to decline as time went on, we don't feel that these airborne data from after the covered period provide us a method to bound the exposures during the covered period or what the airborne concentrations might have been during the covered period because, while we see them decline in later years, we don't know where they declined from in 1959. And so we don't feel like we're able to bound those earlier exposures -- or earlier airborne concentrations based on that later data. Based on claimant interviews that have been conducted, it appears pretty regularly that routine chest X-rays were performed on an annual basis as part of the routine physical. This is not an unusual practice, and so if -- we believe we can reconstruct the medical dose based on those protocols in the other existing Technical Basis Documents that we've already published about reconstructing medical

exposure.
So we have identified a case where we felt it was not -- we could not obtain sufficient information to do a dose reconstruction with sufficient accuracy. On August 25th we notified the representative claimant that dose reconstruction could not be completed for his case -- or her case, I don't know which -- and a copy of the Special Exposure Cohort petition Form A was provided that claimant. This is essentially the short form petition, please sign and send it back and we will do a petition evaluation report.
Petition -- the type -- part A -- Form A petition was returned to us on September 6th and we proceeded with the preparation of petition evaluation report which, you know, we -- much of the research for we had done in order to arrive at the conclusion that we couldn't do the -- it wasn't feasible to do dose reconstruction.
So our conclusion is we lack the monitoring, process, or source information sufficient to estimate the internal doses resulting from non-uranium nuclides for the period of January 1st,

1959 through December 31st, 1976, which is the entire covered period for the EEOICPA program for this facility.

And we do believe that we have sufficient information, though, based on the records we've received from claimants -- relative to claimants -- not from claimants, but the records of the claimants that we have received, we have sufficient information to estimate the external dose, the internal doses from uranium and the medical exposures for the period, for the SEC period.

With respect to your health endangerment, we have not identified incidents or a single incident that would result in a -- in a dose of the magnitude similar to a criticality accident, so we don't believe that presence is suitable -- is a suitable criterion for inclusion. But we do believe that there's evidence that workers were chronically exposed to some level of radiation exposure, and that exposure is sufficient to potentially endanger their health, and therefore there's a -- we do believe that there is a potential for harm, given chronic exposure to the -- at the plant.

Our proposed class definition is all AWE employees who were monitored, or should have been monitored, for exposure to ionizing radiation while working at the Allied Chemical Corporation plant, Metropolis, Illinois, for a number of work days aggregating at least 250 from January 1st, 1959 through December 31st, 1976, or in combination with work days within the parameters established for one or more other classes of employees in the SEC.

Now it's probably worth mentioning at this point that when we use the phrase "monitored, or should have been monitored" for this plant, and it appears that certainly for a period of this -- of this time there was a -- a strong comprehensive monitoring program. I think there -- it may be that there would be people who worked during this period who should not have been monitored, were not monitored, and were correctly not monitored. And there may be judgments made to that effect based upon -- perhaps on job title or perhaps on other considerations. I'm just speculating at this point. But I think the opportunity is here to say that the -- there -- maybe not everyone was

exposed and therefore faced with potential for harm for -- that the exposed workers faced, so I would comment that that may be the case here. Our recommendation then, based upon our evaluation of available data, is that for this period, January 1st, 1959 through December 31st, 1976, we find that we cannot construct the entire dose with sufficient accuracy for compensation purposes, so we don't believe it's feasible to reconstruct the dose entirely during that period. And we do believe that there's potential for health endangerment. These are the two questions that we have to address in our recommendation.

And so much for my presentation.

DR. ZIEMER: Thank you, Stu, and if we were to use the additional breakdown chart as we did in the others, then if I can summarize --

MR. HINNEFELD: Uh-huh.

DR. ZIEMER: -- for external you would say feasibility is yes?

MR. HINNEFELD: Yes.

DR. ZIEMER: For internal, uranium would be yes --

MR. HINNEFELD: Yes.

DR. ZIEMER: -- and other nuclides would be no.
MR. HINNEFELD: Correct.
DR. ZIEMER: For external medical, yes.
MR. HINNEFELD: Yes.
DR. ZIEMER: So it's again, as in other cases, the driver here is internal other than uranium.
MR. HINNEFELD: That's correct.
DR. ZIEMER: Thank you. Comments or questions on this -- yeah, Wanda Munn.
MS. MUNN: I guess this does raise a question that perhaps has not gotten as much thought as it deserves, which is, in situations like this, how are we going to legitimately decide whether a person should have been monitored when we have this interesting mixture of employees and very differing sets of -- of job descriptions there. Is there -- is there some way we can parse that reasonably?
MR. HINNEFELD: Well, I -- maybe the short answer is it's not our responsibility to decide that. The Department of Labor administers the class, and so -- I mean that would be the short answer.
There are probably -- there -- there may be information available for the specific

individual based on job title or other information that we have from them, but I don't -- I'm not familiar with, I don't have handy -- you know, memorized, or I don't know particular -- that provides additional information about that and about who really was potentially exposed or not.

MS. MUNN: Really just wanted reassurance that that responsibility was not going to wash over into some of the activities that we have, that this will remain outside the purview of this Board's --

DR. WADE: Oh, I don't --

MS. MUNN: -- responsibility.

DR. WADE: I mean I don't know that that's a given. I mean the Board can approach its definition of a class in a variety of ways, so the Board could decide to opine on that issue based upon how it would define the class. The -- the Board could say all the workers. So I don't know that it's necessarily outside the purview of the Board. It could be, depending on how the Board chooses to do its business.

MS. MUNN: Thank you.

MR. HINNEFELD: Now when I was up here earlier

I was asked -- when I was up here speaking about Harshaw, I was asked how many claims are we talking about and I said I'd have the answer by 3:00 o'clock from my staff back in Cincinnati, and I do have it. I have it for both sites.

For Allied Chemical, the site we're talking about now, there are 59 total claims that have time in the SEC time period, in the covered period; 26 of those claims have at least one SEC-listed cancer.

For Harshaw, the one I spoke about earlier, they have 13 total claims in the SEC time period, and nine of those have at least one SEC-listed cancer.

DR. ZIEMER: Harshaw was 13 and nine?

MR. HINNEFELD: Thirteen and nine.

MS. MUNN: Very good.

DR. WADE: But we do have a petitioner's representative to hear from, as well.

DR. ZIEMER: Yes, do you have comments to make on this petition, sir?

MR. KLINGHAMMER: Yes, sir. I do appreciate the work that NIOSH has done and all the hard work went into it there. To the one question

about the job titles in the -- in the plant, if I could maybe clarify some of that, in the plant, as far as maintenance, we work -- we work all over the plant, so you would be assigned -- you were always going to get to work in the feed building or the related buildings around.

And on -- in the production side, everyone is expected to do general labor, so they're liable to -- they -- they might shut your unit down here and have you digging out a elevator of UF-4 in the basement. So the jobs are just spread all over the plant, and there's no way you can escape. Our main process is, you know, UF-6, and some of the by-product operations outside in the different buildings, they will all eventually work in the feed building. It's just -- it's just part of it. You're going to be there.

On -- course I do appreciate the work done, like I said, in the -- in the years of eligibility, but we also had two incidents and one of them I'd like to bring up was a UF-4 with plutonium in it that came from Fernald that ca-- that ended up in our plant in the

late '90s. And I don't know if anyone ever brought this to NIOSH's attention. We have a hard time pap-- paper-chasing this down. We know it came from Fernald, but we don't actually know where its origin was. It could have been -- you know, it could have been Oak Ridge, it could have been Paducah; we don't know. But it came in that plant and we're estimating -- I've got paperwork on it -- probably '98 or '99 from there. And also -- and with that said, I think that deserves to be looked into because that's introducing some compounds in our plant that -- you know, that most people didn't know was there and maybe should not have been there.

Also on cylinder -- cylinder wash, we -- we received cylinders back from Paducah, and they could come from anywhere in the complex and -- our UF-6 cylinders, and we also -- we washed the hills out of them. So we believe there is a very good possibility that transuranics were introduced back into the plant from either Paducah, Portsmouth or wherever, 'cause we have no way of knowing, what we sent out, if we got the same cylinder back. Those cylinders in the

-- in the complex could come from anywhere. So those are two of our concerns. And on our dates of eligibility, like I say, I've -- I'm not here to look a gift horse in the mouth and -- and I appreciate the work that's being done, and I'm just trying to add to it and I think there's more work to be done. And we have not had a official worker's outreach. I did organize a little bit last summer with the DOL and NIOSH came in and they was very helpful to some of my retirees, but I -- I could be more organized if I had an outlet to -- to go to.

DR. ZIEMER: In regard to your statement about the plutonium and other possible nuclides, if that were the case, I -- I don't see that that would change your recommendation. It would basically reinforce it, would it not?

MR. HINNEFELD: Yes, it -- and I --

DR. ZIEMER: The recommendation for SEC. Unless it changes the dates in some way.

MR. HINNEFELD: Well, there's -- there's a question here about the dates.

MR. KLINGHAMMER: The dates is -- and I know the people that set the parameters on dates are not here, and I know that the Department of

Labor -- with DOE or whoever -- helps set the dates, and we just have to follow those guidelines, or NIOSH does. But I just wanted to put it as part of the record --

DR. ZIEMER: Yeah.

MR. KLINGHAMMER: -- of what we see that could contribute to expanding these dates and the residual effect, even without this other material, could come --

DR. ZIEMER: Is that information --

MR. KLINGHAMMER: -- into play.

DR. ZIEMER: -- available on when the plutonium that you referred to was introduced, or the other...

MR. KLINGHAMMER: I would have to dig into my files 'cause when the plutonium hit the plant -- or this green salt hit the plant, I would have to do what I could, but it might take more than me to get -- to get to the bottom of it --

DR. ZIEMER: Is this --

MR. KLINGHAMMER: -- as to --

DR. ZIEMER: Well, let me ask NIOSH. Is this new information or is this something we knew about?

MR. HINNEFELD: This is not something that was

talked about in the petition evaluation report, given the time frame. I mean, you know, for material that was sent there in the '90s and, you know, our -- you know, we really don't have the authority or the ability to expand the covered period of a site beyond, you know, what's been established.

Now, having heard this information, though, there may be avenues we could pursue about finding out the -- the evolution of that --

DR. ZIEMER: Or -- or if there was something --

MR. HINNEFELD: -- and the (unintelligible) --

DR. ZIEMER: -- present after this time period that could open --

MR. HINNEFELD: Yes. Then again, this is pretty far outside my bailiwick in terms of talking about what makes a site covered and what makes it --

DR. ZIEMER: Yeah.

MR. HINNEFELD: -- covered work. In the -- in the '90s, certainly Fernald wa-- had done -- was done producing and was dispositioning DOE inventory in whatever way it could. This may have been an excess uranium sale to the private -- to private -- which probably is a little

different than a shipment from a DOE facility as part of that DOE facility's operation.

MR. KLINGHAMMER: I do have -- I do have further -- I do remember. We did bring NRC involved in that and so they would have -- they came in and done their own investigation as far as checking the material, so they would -- it would be on record with NRC.

DR. ZIEMER: Thank you.

DR. WADE: We do have a request from the audience that we all speak into the microphones clearly, so -- to the Board and to people who come to the microphone, please.

DR. ZIEMER: Thank you.

MR. KLINGHAMMER: Thank you very much.

DR. ZIEMER: Brad, do you have a comment?

MR. CLAWSON: Yeah, I -- hello? I was just concerned because they were only calling out the UF-6, and what I was wondering was if it addressed any of the -- if they'd diluted, because I guess from my standpoint, I know that Idaho sent out some stuff from -- that had not gone through first or second or third cycle yet and it was not highly enriched, so I know that they sent out to Metropolis a dilution process

to be able to utilize that. I've -- I'm wondering if we got any information on that because --

DR. ZIEMER: Do you know what form that was in, other than these forms here, you mean?

MR. CLAWSON: Yes, it was a -- it was a different form. It was after the process of dissolving the fuel down. But it's -- it had not gone through first or second or third cycle because -- to be cleaned up because it was not enriched enough to be able to utilize that, so it was sent out to be able to ru-- to be run through there with their feed stock to go into the cleanup process, and this was in the early -- early '70s and late '60s. So I was just wondering if the -- if -- if NIOSH had looked at any of -- any of the other products that came in from other sites, say Hanford or Idaho. It seems like we had a tendency to do that.

DR. ZIEMER: Again I would ask whether that would change this recommendation at all.

MR. HINNEFELD: Yeah, we've said that for products that would have other constituents in it, you know, other radionuclides besides uranium, we can't -- we don't feel like we can

reconstruct --

DR. ZIEMER: They're saying --

MR. HINNEFELD: -- the internal dose (unintelligible).

DR. ZIEMER: -- they can't reconstruct dose anyway, so that --

MR. HINNEFELD: The external dose should be appropriate to be measured by the monitoring devices they used, we believe. We can't -- we can't reconstruct the internal doses from things other than uranium, so the things other than uranium that would have come in with that material we can't reconstruct anyway, so our evaluation wouldn't be changed by that information.

MR. CLAWSON: Okay, I understand.

DR. ZIEMER: I guess the way I'm looking at it is unless the plutonium and other materials came in after '76, it doesn't appear that it would change this recommendation. At least that's how I read it. And is -- in this case, is the '76 date -- is that established by the -- either the contract or the DOL? Pete, can you speak to that? Do you know in this particular case, is that -- '76 is locked in,

you know --

MR. TURCIC: That -- well, it's not locked in if we get information that's material and that there was a contract at a later date that went beyond that, we could expand that date.

DR. ZIEMER: Could expand, so that doesn't close the door if --

MR. TURCIC: Right.

DR. ZIEMER: -- if --

MR. TURCIC: But if it came from Paducah -- you know, if it came from Paducah after Paducah became USEC, that wouldn't be DOE. So that would just be a commercial operation and...

DR. WADE: Yeah, I'd like to just get on the record that -- is -- is the NIOSH recommendation for the entire covered period?

MR. HINNEFELD: Yes.

DR. WADE: Okay. And -- and if that period was to be changed, it would need to be changed by DOL and DOE, not NIOSH or this Board.

MR. HINNEFELD: Yes, and if it were changed, I -- now we may really want to look at what we know about those years. You know, we have no non-uranium bioassay data up through 1976, because that's what we evaluated. If the -- if

the -- if the covered period is changed, if there's a contract in the 1990s, for instance, and there -- so that is added, then it would still take us to look in 1990 -- do we have non-uranium data in 1990, because that was not part of what we looked at at this time.

DR. ZIEMER: Yeah. So in fact that wouldn't affect this recommendation for an SEC at this point.

MR. HINNEFELD: Correct.

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

(No responses)

Okay. Thank you, Stu. Board members, do you wish to make a recommendation on this particular petition at this time?

MS. MUNN: Yes.

(Pause)

DR. ZIEMER: Wanda and Jim are in collusion here, I think, for some reason. They're trying to see who's going to make the recommendation.

DR. MELIUS: No, no -- being requested. I already have my second, though.

DR. ZIEMER: Okay, Wanda is -- is going to make --

DR. MELIUS: I would -- oh, go ahead.
DR. ZIEMER: Jim's ready to recommend whatever you say, Wanda.
MS. MUNN: That's nice.
DR. MELIUS: Save it, right?
MS. MUNN: I would like to move that the worker at Allied Chemical Corporation who are covered by the Special Exposure Cohort -- that's before us today, Petition Number 00067, be granted Special Exposure Cohort status in accordance with the stipulations of that SEC petition.
DR. ZIEMER: And seconded?
DR. MELIUS: I second it.
DR. ZIEMER: And this again the Chair will interpret as being with the caveat that the exact wording of the motion will come before us for a final look tomorrow.
DR. MELIUS: Right.
DR. ZIEMER: In a similar fashion as the other items that we've agreed to earlier in this meeting.
Are you ready then to vote on this petition?
DR. WADE: Could I -- could I raise a qualif-- just a clarifying point? We do have this issue of -- of workers who were monitored or should

have been monitored, and I -- I haven't heard discussion on that, or resolution of that.

DR. ZIEMER: Well, let me comment on that, Stu, and then you can comment on it. I -- it would seem to me that, since we're arguing that dose cannot be reconstructed because of the internal issue, we can argue that those should have been monitored for internal and weren't and therefore meet the criteria. That's my initial reaction. Help me understand that if that doesn't make sense. I mean --

MR. HINNEFELD: Well --

DR. ZIEMER: -- yes, they were monitored, but not completely monitored is sort of...

DR. MELIUS: If they --

MR. HINNEFELD: We have a population of workers who were monitored for uranium, effectively. Okay? And it's a pretty -- a pretty robust set.

DR. ZIEMER: Right.

MR. HINNEFELD: I mean a pretty high percentage. There may be other workers who were not, where we have these people -- you know, no monitoring performed. And so the question then becomes did they correctly not

monitor certain people, and this -- we'd do -- what we'd have to do -- we'd have to learn some more about the plant. Was there, for instance, an administration building. Was there an administration building somewhat remote from the plant that people didn't leave the administration building. And if the characterization of the site was sufficient, you would say well, okay, people in the administration building maybe wouldn't need to be monitored. So there's a opportunity for that.

I'm not saying that there's anybody like that. I'm saying that, unlike Harshaw where we're pretty clear that we wouldn't today say that people who worked at Harshaw shouldn't have been monitored, we may today say that there may be jobs at Metropolis where people don't need to be monitored. So it's just an op-- it's a possibility that I wanted to -- you know, to mention, not a definitive statement that there are some people there who shouldn't have been monitored. I didn't mean to say that.

DR. ZIEMER: Okay, Jim, and then --

DR. MELIUS: Yeah. Yeah, my understanding is

that we'll hear Pete Turcic and the Department of Labor will be presenting tomorrow and -- morning, and my understanding was that we were going to wait before we finalized our -- our, you know, letters until after we'd had a chance to discuss some of these issues -- at least generally and maybe specifically -- for these sites with -- with Pete, so...

DR. WADE: That's fine.

MR. KLINGHAMMER: Also I'd like to ask if our security guards are part as covered employees.

MR. HINNEFELD: Well, as -- as a general rule, security guards -- our view of security guards is they're exposed. You know, security guards sometimes in the DOE system weren't particularly -- weren't necessarily badged or monitored the same way the production workers were. As a general rule, security workers, security guards were exposed.

MR. KLINGHAMMER: Okay, so they would be covered in --

DR. ZIEMER: Well, that's true, even if --

MR. HINNEFELD: Again, that's not my decision.

DR. ZIEMER: They might not have been employed by --

MR. HINNEFELD: It's not my decision.
DR. ZIEMER: Security guards are often employed by, you know, Wackenhut or somebody --
MR. KLINGHAMMER: They are Wackenhut.
DR. ZIEMER: Okay, how about that? That was a shot in the dark, but they're -- they're not employed -- so -- so what's -- what's the impact of that, Pete?
MR. TURCIC: Since it's an AWE, any subcontractors are not covered. That's statutory. There is just no way around it.
MR. KLINGHAMMER: Okay. Given that, how about our sampling plant that was run by a contractor, Lucius Pitkins*, up to what year, (unintelligible), '78?
UNIDENTIFIED: (Off microphone) (Unintelligible)
MR. KLINGHAMMER: It was a contractor that run the sampling plant. It was not Allied Chemical.
MR. TURCIC: (Off microphone) (Unintelligible)
DR. ZIEMER: Pete can put -- put that on the record on the mike here.
MR. TURCIC: Again, for AWEs, only employees of the AWE are covered, and that's a statutory

requirement that -- just cannot get around, so no subcontractors are covered at AWEs.

MR. PRESLEY: I have a question, please. Were your -- when did Wackenhut pick up your security contract?

MR. KLINGHAMMER: Wackenhut -- it used to be Burns, so it's --

MR. PRESLEY: Oh, okay.

MR. KLINGHAMMER: -- always been a (unintelligible) --

MR. PRESLEY: So it has been a -- it's always been a --

MR. KLINGHAMMER: It's always been external, yes.

MR. PRESLEY: Okay. Thank you, sir.

DR. ZIEMER: Was there another question?

(No responses)

Okay. The implication here is that there -- there might be some words in the actual final document that address this issue of "or should have been monitored". Okay.

MR. HINNEFELD: Well, that -- that language also comes from the statute in the establishment of the original --

DR. ZIEMER: Right.

MR. HINNEFELD: -- the statutory --
DR. ZIEMER: Right.
MR. HINNEFELD: -- defined classes.
DR. ZIEMER: Okay. We'll now vote. All in favor of this motion -- the motion is to approve the SEC -- say aye -- well, raise your hand, we'll get a hand count.
(Affirmative responses)
The Chair's also voting. It appears to be everyone here.
Any no's?
(No responses)
Any abstentions?
(No responses)
None? I assume Dr. Poston is not on the line. Is that correct?
DR. WADE: Correct. And so the vote, for the record, is nine zero.
DR. ZIEMER: Thank you.
MR. PRESLEY: We need to find out something about John.
DR. ZIEMER: We have -- we have a public comment period this evening, but we have a couple of individuals who did wish to make public comment that are not going to be able to

be here this evening, and we want to afford them the opportunity to speak. Do we know who they are?

DR. WADE: One's --

DR. ZIEMER: Mary Beth -- is it Mary Beth? Okay. And is there another one also, do you know?

DR. WADE: I don't know.

DR. ZIEMER: Okay. Well, go ahead, Mary Beth.

MS. CHARLEY: My name's Mary Beth Charley. I'm here on behalf of my father, Robert, who worked at Blockson. We've heard so much about the dose reconstructions inside the building, outside the building, in Florida, in Joliet. We've heard absolutely nothing about the four retention ponds that were there that these men had to stand there with rifles and guard. I've heard absolutely nothing about that. And this is my -- just a little comment I'd like to make. This has been going on now for almost seven years.

Most times you're given a specific amount of time in order to produce your records or you're held responsible. If they can't produce the records from '55 to '58 and this has been going

on for seven years, how much longer will it go on? Thank you.

DR. ZIEMER: Thank you. And could somebody help me understand the retention pond issue further. Is -- was that -- is this a retention pond that's holding the -- the tailings or what -- what is the issue on the retention ponds, do we know?

Larry, okay.

MR. ELLIOTT: Unfortunately Brant Ulsh and Tom Tomes have left, and they were the ones who might have been aware of this. I am not aware of the retention ponds. We'll check --

DR. ZIEMER: But since we --

MR. ELLIOTT: -- into this.

DR. ZIEMER: -- are going to be reviewing Blockson further, perhaps we can ask that any issues relating to that -- it's not obvious to me whether that would be included if there were an SEC or if it's included if there's not an SEC. It's par-- it's on the site. Is that correct?

Okay. Thank you. Was there someone else that wished to make a comment?

(No responses)

DOL PROGRAM UPDATE
MR. PETER TURCIC, DOL

Okay. We are a bit ahead of schedule and since there are members of the Board that were hoping tomorrow to -- to be able to catch planes in the late afternoon, it -- it is possible that -- and I believe Pete has agreed that if we have the time we would proceed with the report from Department of Labor. It's on our agenda for tomorrow morning. But Pete, if you're agreeable, without objection from the Board, we'll hear the report from -- Department of Labor update.

(Pause)

MR. TURCIC: Is it on now? Okay. Just to give you a status of -- of where we're at with the program, again, just a brief overview. The Part B became effective July of 2001 and to date, as of November 30th, we've received nearly 55,000 claims -- cases, with over 78,000 claims involved in those cases. Of those, 35,000 of them are claiming cancer and 22,700-and-some have been referred to NIOSH for dose reconstruction.

Part E was enacted in 2004 and our regs were

issued in June of 2005. And in that program we've -- we have about 43,000 cases involving 58,000 claims. Now we inherited some 25,000 -- over 25,000 cases from DOE, which was the old Part D program. And that, again, became effective in -- in June.

Now under the two programs now we've been getting on the average -- we get about 100 cases -- new cases a week in Part B and right around 200 -- anywhere from 150 to 200 a week in Part E.

The compensation that has been paid -- we've paid a total of $2.4 billion in compensation. Of that, $1.8 billion is from Part B, with $1.3 billion being related to cancer claims and another $212 million -- $212 million were RECA claims under the Radiation Exposure Compensation Act.

Part E, as -- as you can see, is growing rapidly and we're at $519 million in Part E already. In fact, the number of cases that we have made decisions and paid in in Part E have now exceeded the cases in dose reconstruction. And then we've paid another $132 million in medical benefits.

The -- the payees, they're -- between the two programs there's a total of 26,000 unique payees. You know, many payees got -- received benefits under B and then also received benefits under E, but uniquely -- 26,000 unique payees have received EEOICPA benefits to date. Of those, 21,700 are Part B payees with 8,756 cancer cases; 5,000 cases that are NIOSH case -- related cases, and 6,679 RECA payees, and 4,267 payees under Part E. And you can see the percentage that -- you know, that that makes up. And as you can see, about 35 percent of the -- of the cases had -- are cancer cases, of the payees.

The status of these 35,000 cases, 24,000 have final decisions. Then there's another 2,646 that have a recommended decision, and at the -- between a recommended decision and awaiting a final decision, a little bit over 5,000, the -- the cases at NIOSH. And 2,910 are pending initial action.

The result of these final decisions in these cancer cases, again, 8,906 approved -- approvals, total 15,397 denials. Now if you look at the denials, 2,700 of them are for non-

covered employment and -- you know, that's either they worked at a facility -- usually it's a facility of -- that is not covered by the Act, or it may be that, you know, subcontractors at AWE facilities, so that would be non-covered employment; 9,052 because the -- the product -- the probability of causation was less than 50 percent; and 2,200 insufficient medical evidence, and 1,130 were non-covered conditions. We had a lot of cases filed under Part B that it was, you know, just a non-covered condition. And then there was, under Part B, 287 ineligible survivors.

The status of the cases referred to NIOSH, again, nearly 23,000 cases have been referred to NIOSH. Seventeen -- you know, nearly 18,000 have been returned, with 1,239 were withdrawn and that's usually -- most of those withdrawn cases are for added SECs, so then the case is withdrawn from NIOSH; 1,600 and -- 16,481 dose reconstructions with currently 937 reworks, and I'll talk a little bit more about that, and about 5,000 initial referrals at NIOSH.

The case status, the 15,000 with a dose reconstruction, 12,700 have final decisions, so

82 percent of the cases that have come back with a dose reconstruction have gone through the system and are at final decision -- have a final decision; 1,900 have a recommended decision but no final, and 885 are pending a recommended decision.

For the results of the cases from dose reconstruction, here again, approvals 3,708 are approvals and 9,033 have been denials.

The new SECs, we track those and we have a process where, you know, we withdraw the cases, we -- those that we can establish as part of the SEC, we process them. Those that aren't, we would, you know, send back to NIOSH. The 1,222 withdrawn for SEC review, 772 of them have final decisions, with 636 approvals and 136 denials. And 343 have a recommended decision but no final decision at this point, and 107 are -- are pending.

The NIOSH -- what we refer to as NIOSH case-related compensation -- so these would be cases that have gone through dose reconstruction or cases that were, you know, at a facility that then became an SEC, total of $636 million in compensation, with 6,240 payees in 4,251 cases.

Of that, $543 million have been paid on dose reconstructed cases and another $93 million so far on cases that have been, you know, withdrawn and processed under an added SEC. These numbers don't include, you know, the five -- or the four statutory SECs. That's just the -- the new added SECs.

And I've been asked about these reworks. From the inception of the program there's only been 1,891 cases that have been returned to NIOSH for a rework. Now looking at what constitutes those -- you know, what was the reason for those reworks, well, 1,159 were changes in medical condition. Either the case -- a -- an additional cancer is identified or, you know, sometimes we'll -- you'll have a case where it's a unknown primary; we send it to NIOSH for a dose reconstruction with an unknown primary. Further medical evidence comes in and now we know what the primary is, so there's a -- a number of reasons. But as you can see, the vast, vast majority of cases that are sent back for a rework are cases -- the reason for the rework is a change in the medical status. And of those, only 150 -- 150 of them had come back

from NIOSH, would have been an approval, and then was sent back for some change in medical condition. And the vast majority there, you know, over 1,000 of them, were denials that were being sent back for a rework to see if -- if the -- you know, that then changed the outcome. And the outcome -- it's been running about 25 percent. When we -- when we send a case -- when we send cases back to NIOSH for a rework, overall -- the overall statistics, and it's been holding right at about 25 percent of them will -- you know, they'll be returned to NIOSH -- it would have been a denial, returned to NIOSH, comes back and it flips from a non-compensable to compensable in about -- about a quarter of the time. Another 607 are employment-related issues. We either find additional employment, usually. You know, in 543 cases we found additional employment and so the case had to go back for a -- a rework. Thirty-four of them were administrative. Could be that the -- several things there would be -- you know, if we found a new -- an additional survivor, for example. We have to send it back because to give the additional

survivor that was just -- you know, just came forward the opportunity to do the -- for NIOSH to do the interview and so forth. And so -- and again, there's only been 34 cases. And only 91 have involved technical issues. So from -- from the program inception to date, there's only been 91 cases that involved a technical issue that was sent back for a rework.

Now one thing on there that I do see and we do see and have a concern that is really looming in the future, and I mean we're starting to get -- and as you know, our process -- NIOSH gives us a dose reconstruction, we issue a recommended decision, that goes to the claimant. The claimant has the opportunity at that point -- in fact, the only point that the claimant has the oppor-- that's the first point that the oppor-- claimant has an opportunity to file an objection on, you know, anything in the case, including the dose reconstruction. And we're getting an awful lot of -- we're starting to get a lot of objections filed based on issues that are before the Board. And what's looming is they're not being resolved.

In our regulation, in -- in a year, a -- if we do not issue a final decision within one year, then the recommended decision becomes affirmed. Well, if we can't address, you know, the objection because the issue is still unresolved, you know, with the Board and NIOSH, then we have no choice but to send that -- that case back. And there are, you know, ramifications, you know, to that. So we do see that looming. That is a ever-growing prospect, and I would just, you know, urge the Board to, you know, come to resolution because -- on issues because, you know, there are consequences to, you know, not having resolutions. I mean these -- there are real cases out there that are really dependent upon resolution of those issues.

And with that, I'd be happy to take any questions.

DR. ZIEMER: Thank you, Pete. Pete, on your fourth slide where you showed the number of NIOSH case payees, these are Part B payees, would -- would that number -- it was 5,035, does that include the SEC --

MR. TURCIC: No.

DR. ZIEMER: -- payees, or is that just the DR -- dose reconstruction?

MR. TURCIC: That would be the DR.

DR. ZIEMER: Okay. Thank you. Jim Melius.

DR. MELIUS: Yeah. I like your new color scheme for your slides. Maybe NIOSH needs -- you know, we've had this yellow and blue and white for a long time. We need a -- maybe a change here.

I -- I have a question on the -- as you just brought up on the rework -- actually a number of questions, but could you give an example of an issue that's waiting for the Board to resolve, 'cause this is the first I believe I've -- we've heard of it, so --

MR. TURCIC: Okay. We'll --

DR. MELIUS: -- this is an issue, so I mean I'd like to have more detail so we can try to address it and figure out how we -- also communicate so we know that -- you know, what -- what is being held up and -- and so forth.

MR. TURCIC: Well, one -- one example is, you know, someone can file a -- you know, there are issues related to like Rocky Flats.

DR. MELIUS: Uh-huh.

MR. TURCIC: Okay. So we have cases that are hanging there, and the objection is that NIOSH did the dose reconstruction in one way and there were issues that are involved --

DR. MELIUS: With the -- yeah.

MR. TURCIC: -- that are unresolved, so we're going to have no choice -- and those are really approaching a year, and they also involve new cases coming in. You know, for consistency, we can't let those -- so -- so that's why I'm saying it's --

DR. MELIUS: Yeah, yeah.

MR. TURCIC: -- it's really the water building behind the dam.

DR. MELIUS: But -- but -- but are they all SEC issues? I guess I'm --

MR. TURCIC: No.

DR. MELIUS: -- trying to identify 'cause --

MR. TURCIC: No, a lot of them are --

DR. ZIEMER: Sounds like they're DR issues, but --

MR. TURCIC: Most of them are site profile issues.

DR. ZIEMER: Yeah, but they involve individual dose reconstructions or SEC cases?

MR. TURCIC: They involve --
DR. ZIEMER: Or both?
MR. TURCIC: You see, what happens, Paul, is the individual will get a dose reconstruction based on --
DR. ZIEMER: So it is a --
MR. TURCIC: -- a site profile --
DR. ZIEMER: -- DR case.
DR. MELIUS: Yeah.
DR. ZIEMER: Okay.
MR. TURCIC: -- and then they file an objection at the FAB based on the issues that are, you know, being --
DR. MELIUS: Oh, okay.
DR. ZIEMER: I guess there's --
MR. TURCIC: -- identified for --
DR. ZIEMER: -- cases out there that -- where there's kind of a time clock running, and I -- this is the first I've heard of it.
DR. MELIUS: Yeah.
DR. ZIEMER: I'm wondering -- and do you make NIOSH aware of those cases, like, you know, case number such-and-such is going to be closed on a certain date if we don't have this decision and --

MR. TURCIC: The -- the way we do that now is we've been trying to hold onto them until, you know, there is resolution. So there's a lot of back and forth between us and NIOSH on is there resolution on this particular issue. You know, if -- if a case comes through that -- that the -- that issue is not going to address, we move it forward. But if -- if there's an issue that's being worked on, and in discussions between the staff -- you know, DOL staff and NIOSH staff -- if there is no resolution -- yeah, and then we -- we do say well, you know, this is approaching a year and we're going to have to send it back. And this is -- this is a growing thing that --

DR. ZIEMER: Yeah, I'm just wondering as we look forward do -- do we need to be made cognizant of what issues these are and the numbers of cases being affected and -- so that --

MR. TURCIC: Sure.

DR. MELIUS: Could --

DR. ZIEMER: -- I mean we're operating I guess in sort of -- oblivious of this --

DR. MELIUS: Yeah --

DR. ZIEMER: -- occurrence.
DR. MELIUS: -- what might be a way of addressing this is if we could at least, for our next meeting, have a snapshot of --
MR. TURCIC: I'll be glad to (unintelligible) --
DR. MELIUS: -- yeah, yeah, of those that -- that would categorize them in broad categ-- 'cause at this --
DR. ZIEMER: Just an idea of the kind of issues --
DR. MELIUS: Yeah.
MR. TURCIC: That can --
DR. ZIEMER: -- and numbers of cases involved and --
DR. MELIUS: Yeah, 'cause --
DR. ZIEMER: -- if there's actions that we can take, either on an interim basis or permanently -- and I don't know, Larry, if you have any guidance for us on that, but we certainly want to help -- if -- if we -- if we're -- if we need to do something to assist NIOSH on that issue, we need to be aware of it.
DR. MELIUS: Uh-huh.
MR. ELLIOTT: Well, this is an emerging issue

that we've been made aware of just recently, as Pete says. When we talk -- when we talk about this interaction between NIOSH and DOL, what we -- what we're trying to communicate in that -- those interactions are have we at NIOSH taken up something we've heard in the Board's deliberation and made an adjustment. And if we have made an adjustment, we let them know that so that they can move that -- that piece forward. If we haven't made an adjustment because it's still unresolved in our minds, then we tell them that. And what I'm hearing Pete tell me in these -- in the latest interactions on this is that we're going to see a lot of claims come back to us that we're going to have to start, you know, attending to and -- and answering questions about and -- and unfortunately for the claimants, not see any progress on until we have a resolution of the issue.

DR. ZIEMER: So it sounds like you're trying to hold off as long as you can, but at some point you've got to do something.

MR. TURCIC: It's -- it's getting to the point, Paul -- we tried to hold off, but we're under

this one-year thing. And you know, I mean if it gets affirmed, then it could go to District Court, and they're just going to send it back anyhow because it's unresolved. But it's starting to become large enough that -- you know, I can't go up to the line on the one year. You know, so that's going to have to start back-- backing off a little bit. But -- but I'd be glad at the next meeting to give you a -- a snapshot of what they are.

DR. WADE: Pete, just so I -- I understand. So with the clock running and approaching a year, your options then are to send it back to NIOSH.

MR. TURCIC: It's -- that-- that's the only option I have.

DR. WADE: The only option you have. And then --

MR. TURCIC: But Lew, it -- it affects -- that would be disingenuous if I only sent those back that approached a year. I mean once the first case approaches a year, I've got to send them all back, even the new ones that come, that suffer the same -- the same thing.

DR. WADE: Okay. Thank you.

DR. MELIUS: You know, I -- I think if we had a

snapshot -- I mean --

MR. TURCIC: Yeah, that'll be -- okay.

DR. MELIUS: -- let's work on it to -- together -- the extent that we -- we can. On -- on the reworks, I believe -- and this may be part of the same discussion because it may be somewhat related, but is -- I think at one point you sort of gave us a snapshot -- this may have been a couple of years ago -- on the -- I think we asked for the technical rework categories just to get a handle 'cause in somewhat -- ways those are -- may relate to some of the issues that we're also evaluating in our dose re-- individual dose reconstruction --

MR. TURCIC: Yeah.

DR. MELIUS: -- reviews and I think it'd be useful to know what those are. And I think it would also be useful as part of understanding the -- sort of the quality assurance/quality control for this overall program is -- I mean the reworks are the ones you send back. You may review a number of others, you know. I don't think the Board's interested in the administrative or the medical or the --

MR. TURCIC: Right, I understand.

DR. MELIUS: -- employment issues as those come up, but certainly where there are, you know, technical issues that you're -- you're focusing on possibly as a result of a rework going back or -- or what you're getting back from NIOSH, I think it would be useful for the -- the Board to have in terms of -- we're trying to make our dose reconstruction review, you know, productive, useful. I don't think the two programs should mirror each other, but -- but hopefully they complement each other, but also we don't want to duplicate activities and so forth. So having an idea of what's one -- what is in your technical -- your reworks that are sent back technically. Also, you know, what -- what's your way of focus-- are these coming from -- how you identify them, I guess is what we're -- we're looking -- would be -- might be useful to us.

MR. TURCIC: We identify them two ways.

DR. MELIUS: Yeah.

MR. TURCIC: One, we identify them either through an objection --

DR. MELIUS: Uh-huh.

MR. TURCIC: -- you know, that a claimant

makes.

DR. MELIUS: Okay.

MR. TURCIC: Or we identify them on our own in that -- frequently what -- what the rework may -- may involve is that something was changed in a site profile --

DR. MELIUS: Okay.

MR. TURCIC: -- in between --

DR. MELIUS: Okay.

MR. TURCIC: -- you know, so --

DR. MELIUS: Yeah. Yeah.

MR. TURCIC: -- so those would be, you know, self-identified or --

DR. MELIUS: Okay. Yeah. I -- I think if we had that -- some sort of a -- a breakdown of where --

MR. TURCIC: Yeah.

DR. MELIUS: -- those are, I think it'd be -- the numbers are a little higher than they --

MR. TURCIC: Yeah.

DR. MELIUS: -- they were the last time --

MR. TURCIC: Yeah.

DR. MELIUS: -- you gave that to us and I think it'd be -- be helpful. If -- somebody else -- then I'd like to ask some other questions, but

I've been --

DR. ZIEMER: Go ahead.

DR. MELIUS: Go ahead? Okay. The issue we've been talking about a little bit earlier with Blockson and -- and Allied and so forth is the issue of how we, you know, define SEC classes. And I think what we're looking for is to make that process as -- as efficient and -- and workable as possible for ev-- everybody involved and that the language we use is something that is, you know, useful to you, so what -- I think we recognize that you have to make that language and -- operational, and often that really isn't -- I mean a lot of it's individual reviewing individual work histories and so forth, while some of it may be -- involve -- really as you -- you know, take -- spend the time to review the -- sort of the employment information and type of information that would identify people in the classes, but -- but I think it would be helpful to know -- for us to know -- one is sort of how you interpret some of this language to make sure it's -- you know, like the "monitored, or should have been monitored" language, make sure

that's the correct language to use. May -- maybe on another -- this -- SEC by SEC basis. It may be useful for some, not useful for others.

And then -- then secondly, what can we do to make this process, you know, work and -- and more efficient? How do we get, you know, feedback and make sure that, at least on a preliminary basis as you look at the SEC, that what we're recommending is -- is useful and workable. I think we all want to avoid confusion and -- and problems -- witness what we went through -- I mean trying to discuss Blockson today, which is maybe an unusual case, but it's certainly something that -- the -- where one could see problems if -- if we had approved that and...

MR. TURCIC: The "monitored, or should have been monitored" is always interpreted in accordance with current standards.

DR. MELIUS: Uh-huh.

MR. TURCIC: That's first of all.

DR. MELIUS: Right.

MR. TURCIC: You know, not what was done at any particular time.

DR. MELIUS: Yeah.

MR. TURCIC: And then basically just, you know, based on that, it -- it really goes to the kind of occupation characterization that Stu mentioned.

DR. MELIUS: Uh-huh.

MR. TURCIC: You know, if there was a facility where there was, you know, an administrative building --

DR. MELIUS: Yeah.

MR. TURCIC: -- and those people weren't monitored or shouldn't have been monitored, then we would not include those in -- in the class. In the example that you were talking about -- I mean we have the occupations at Metropolis, for example.

DR. MELIUS: Right.

MR. TURCIC: Apparently there is a lot of internal monitoring data.

DR. MELIUS: Uh-huh.

MR. TURCIC: So that at least tells you what occupations and the scope, you know, of who was monitored --

DR. MELIUS: Uh-huh.

MR. TURCIC: -- or should have been monitored.

DR. MELIUS: Uh-huh.
MR. TURCIC: Now they weren't monitored for all the...
DR. MELIUS: Yeah.
MR. TURCIC: And so, you know, based on that, we would probably look at those occupations --
DR. MELIUS: Uh-huh.
MR. TURCIC: -- and say well, okay, these would -- or should have been monitored, and anything outside of that we would, you know, look on a case by case basis and whether it made sense, based on what they did, that they should have been monitored.
DR. ZIEMER: But Pete, this presumes that you have some knowledge -- for example, if someone is -- let's say they're just a -- no, let's say they're a clerk, an administrative clerk in the financial office or something.
MR. TURCIC: Yeah.
DR. ZIEMER: Unless you know that they don't have access to the restricted areas, you can't simply say, by job title, well, they shouldn't have been monitored anyway --
MR. TURCIC: Well --
DR. ZIEMER: -- or do you? I mean --

MR. TURCIC: Well --
DR. ZIEMER: -- I want to make sure that Labor is looking at this the same way we do. I mean if -- if we can -- if we can ascertain that Building A on a given site -- people cannot go from there to Building B because in Building B you need a special badge, or there's some restriction, and therefore we can exclude that in our description --
MR. TURCIC: Uh-huh.
DR. ZIEMER: -- but I think if -- if we think that you can't do that, and you guys are doing it based on a title, then I -- I would be concerned that we're -- we're not reading the same --
DR. MELIUS: Yeah.
MR. TURCIC: It depends on how you -- and that's why it's so important, depends on how you write the definition. And it's all -- like -- let me give you an example. You have Y-12 early years. You have it functionally. As I said before, when you put something -- you -- you put a functional definition in there, that is the most difficult to administer. Now -- so the way we did that was -- I mean the -- the

functional definition was uranium enrichment, people that were involved in uranium enrichment and other radiological activities. We translated that into three different groups of -- and -- of occupations. The -- the first group were groups of, you know, occupations where there was no doubt that they would have been exposed to -- they were involved in uranium enrichment, so any of the occupations, any of the buildings, you know -- we said all right, if you fall into that category, there's nothing else the claims examiner has to look at, doesn't have to do any more development work.

Then there was the group down on the other end where it raises a question -- cafeteria worker.

DR. ZIEMER: Yeah.

MR. TURCIC: Okay? So what we do there then, the claims examiner has to do development work. In that group we would ask for -- we would need to see some -- some kind of evidence that they were in fact in that area, in the area where the uranium enrichment was going on.

DR. ZIEMER: Okay, so you actually ascertain, either by affidavit or --

MR. TURCIC: Well --
DR. ZIEMER: -- other evidence, that they actually not only had the opportunity to go into an area, but actually did.
MR. TURCIC: Yeah. Now there's the middle group, Paul.
DR. ZIEMER: Okay.
MR. TURCIC: There's the middle group, and so -- the first group, we don't do any more development, we -- we just accept that that was -- the other group where, you know, it would raise questions -- if a cafeteria worker was involved in uranium enrichment activities. Then the middle group were people who could be assigned anywhere -- mechanics, electricians, you know, those kind of things. So what we do there is we say -- and we have the claims examiner and instructions for the claims examiner, in this example, to look in the record. Absent information in the record to the contrary, you assume that they were in the uranium enrichment.
Now if -- if in the interview they said that they were a mechanic and they worked, you know, at some other part of the facility or doing

something else, then we wouldn't put them in that group unless they could show that they were, you know, in there for the 250 days. So that's how it's done when it's -- when it's functionally. Then you have a situation, you know, more where it's -- it's buildings, and that becomes a lot easier because then you're not worried about the occupations. So that -- that's how -- and again, it really comes down to --

DR. ZIEMER: Okay, that's helpful to know that. Jim Lockey, and then Mike.

DR. LOCKEY: In the -- in the case of General Atomics and NIOSH, at the end of the proposed class, listed 15 buildings that they thought should be included in the class.

MR. TURCIC: Uh-huh.

DR. LOCKEY: Is it the Department of Labor's position they would accept that list as -- with -- actuality the class would be?

MR. TURCIC: Okay, we would -- what we would do there is we would -- then it becomes an empirical evaluation of what is available. If we could put people in those individual buildings, then fine, that's what we -- we

would use. Or affidavits -- you know, we use more than just -- you know, just the -- the employment records. There are facilities -- what I said about Blockson -- we can't -- we can't put people there so we just assume that they -- that if you were at Blockson, you were there, you know. Bethlehem Steel, we can't put people in the mill that ran the 13 runs or whatever it was. If you have employment verified at Bethlehem Steel, you were there. And so it's -- it's really a -- you know, it's really a case by case basis.

MR. GRIFFON: That's -- that's -- the example you gave, that's regardless of job title.

MR. TURCIC: Exactly. Exactly.

DR. ZIEMER: Mike Gibson.

MR. GIBSON: What did you say, Mark? I didn't hear your question.

DR. ZIEMER: Regardless of job --

MR. GRIFFON: Regardless of job title in that last case he's say-- even administra-- even if a person had a title as secretary or clerk, you'd say we don't know enough about --

MR. TURCIC: If they were at that facility --

MR. GRIFFON: -- it's a done deal. Right?

MR. TURCIC: That's it.
MR. GIBSON: You're saying it's a done deal, or do you ask the person or -- an administrative clerk --
DR. ZIEMER: No, in that case at Bethlehem Steel, if they're in Bethlehem Steel --
MR. GIBSON: Well, I'm saying --
DR. ZIEMER: -- it doesn't matter what the job title is.
MR. GRIFFON: Right.
MR. GIBSON: It doesn't matter what the job title is.
MR. GRIFFON: But for other places, it does matter. It depends on how we -- we --
MR. PRESLEY: Yeah.
MR. GRIFFON: -- develop it, you know.
MR. GIBSON: So like -- I mean you've got an administrative clerk that works in a office building, that's it. I mean it's full of -- you know, mahogany row, but you have administrative clerk that works for a manager in a radiation building who goes out and gives jobs to the foreman every day --
MR. TURCIC: I underst-- yeah.
MR. GRIFFON: Yeah.

MR. TURCIC: And it depends on how you defined a class, you know, what we would do.
MR. GIBSON: But --
MR. TURCIC: Exactly right. I mean if it's --
MR. GIBSON: But if a --
MR. GRIFFON: But then --
MR. GIBSON: I guess my question is, if DOL looks at a job and it's something that -- like you mentioned, cafeteria worker, or administrative clerk, you don't just necessarily assume they shouldn't have been monitored.
MR. TURCIC: No, what we would do -- now you're confusing -- you didn't ask the question about monitored. You're -- you're -- you asked --
MR. GIBSON: (Unintelligible) was included.
MR. TURCIC: -- (unintelligible), Mike. You asked coverage. If you're asking about, you know, monitoring, we would have to look at the case-specific, you know, situation. You know, if it was a facility where there was a administrative building and we knew that people in that building, you know, weren't monitored and shouldn't have been monitoring (sic), you know, then we would -- we would go with that.

If it was the situation you're talking about, situation like that, in most places, that would be monitored and we would assume that the administrative people would be monitored.

DR. ZIEMER: I think the --

MR. TURCIC: I don't think we've ever -- I -- I -- I can't remember a case where -- to be quite honest with you, where we have denied the case because we said well, we can put you there but we can't say that you should have been monitored. I don't think there's ever been a case -- I mean this --

MR. GRIFFON: But it -- yeah, do -- do you -- this is a broader question, but do you have a -- you must have a logic tree that your claims processors are working from, and is that something that can be shared with the Board or no?

MR. TURCIC: Well, the logic tree depends on how --

MR. GRIFFON: Because there's --

MR. TURCIC: -- you define it.

MR. GRIFFON: -- there's all -- yeah, yeah, I know.

DR. MELIUS: It's devel-- it's buil--

MR. TURCIC: Yeah.
DR. MELIUS: Yeah.
MR. TURCIC: That's why it's so important, you know, and that's why I said, you know, at the last time --
MR. GRIFFON: Yeah.
MR. TURCIC: -- I -- I met with you that by a spatial determination is a lot easier than a --
MR. GRIFFON: But if -- if you do --
MR. TURCIC: -- a functional.
MR. GRIFFON: I mean I -- I -- I also get concerned if we do the building-specific sort of specificity in our write-up, if the only information you have for that site for individuals is job title, then you can have an electrician that wa-- and you might even have building. You might say the electrician was in Building A, but if -- if -- and -- and maybe your -- you -- you know -- I mean I guess I would be concerned if you don't know enough about the facility, you don't know if the person worked in that maintenance shop the whole time or if they went out to the other buildings --
MR. TURCIC: Mark, we --

MR. GRIFFON: -- and there may be no records in individual's record to show that.

MR. TURCIC: Even -- even if it's buildings -- okay? Even if it's buildings, then we would always consider, you know, functions like maintenance, electricians -- you know, things like that -- we always assume that they might have been assigned anywhere, and that gets factored in. So more than likely what would happen -- you know, I mean -- every way I -- I can think that, you know, you could define a class, what would happen with that class of people would be this idea that, absent information to the contrary, we would say that these occupations are covered.

DR. ZIEMER: Mike, does that answer your question?

MR. GIBSON: No, I think -- I'm still -- so you basically have a set of job titles and, absent any information -- if we go building-specific, absent any information, you'd say yes, these people are probably covered.

MR. TURCIC: That's what we did, and that's how we'll be handling the later Y-12, exactly.

MR. GRIFFON: Except for --

MR. GIBSON: My point is, again, if it's even building-specific, there's some sites that have say administrative clerks, for example again, that worked 40 hours a week in that rad building for a manager who also has a --

MR. TURCIC: If -- if they worked in the rad building, that was a covered building, they're covered, no matter what their occupation was.

MR. GIBSON: But I -- I thought you just said there was almost like a --

MR. TURCIC: No, I'm saying that -- I'm saying for -- for occupations, but you can't put them in that building. If you do it by building and we can put them in that building, they're in, no matter what occupation. But you take somebody like a maintenance person who may not be in -- you know, maybe we can't put him in that specific building, but knowing that maintenance people are assigned all over the place -- absent information in the file, you know, that they were somewhere else and not in that building -- we would assume that they could have been assigned in that building and worked in that building.

MR. GIBSON: So an administrative clerk or

someone like that would have to put in their affidavit or in their claim that they worked in a rad building.

MR. TURCIC: Yeah, and then if they didn't, you know, we still don't cut them off. We give the opportunity for them to explain well, yeah, I'm here -- my duties required me to go all over, you know. I mean it's not like -- it's not like you're cut off and have no opportunity.

DR. ZIEMER: Okay. Thank you. Jim, additional question or --

DR. MELIUS: No, I'm sorry, I -- yeah, I guess I --

MR. GRIFFON: Go ahead.

DR. ZIEMER: Well, now that he -- now that I ask --

DR. MELIUS: Mark wanted to say something. Or -- or is our process, in terms of getting input from you and -- in terms of these issues -- I mean -- and I think we've talked before, it's certainly helpful to have somebody in -- involved from DOL as we're deliberating this, particularly if we're -- I guess if we're considering sort of a -- a non-building-specific or what may be a problematic way of

making designation -- I'm particularly get concerns when we start getting some of these big sites that -- where we may not -- we may -- doing a very specific types of -- of SECs that could very well be process-oriented or something. I mean that may --

MR. TURCIC: Well --

DR. MELIUS: -- building -- I mean that -- that we need to be careful about how we go forward and -- you know, terms of making these definitions and so forth.

DR. ZIEMER: Well, I think Pete --

MR. TURCIC: Yeah.

DR. ZIEMER: You said building-specific is a little easier for you to administer.

MR. TURCIC: Yeah.

DR. ZIEMER: I think on the -- we had the -- what was the process, the -- at Los Alamos.

UNIDENTIFIED: (Off microphone) RaLa.

MR. GRIFFON: RaLa, yeah.

DR. ZIEMER: Yeah, the -- the RaLa, yeah, that was a process-oriented definition. Is that -- that causes you more --

MR. TURCIC: Well, no, that was an area.

DR. ZIEMER: Oh, it also was co-- coincident

with an area, so it was a little easier.

MR. TURCIC: Yeah.

DR. ZIEMER: But you could have one described in that way that maybe involved multiple parts of the site --

MR. TURCIC: Yeah.

DR. ZIEMER: -- that's a little different, but typically even there it brings certain buildings into play.

MR. TURCIC: I -- I would suggest, Paul, that maybe the process is disjointed. I mean you really have two parts to the process. One, what doses can't you reconstruct. Now once you identify that, then you have a process of how best to define the class so you cover the individuals that were exposed to that dose, and --

DR. ZIEMER: Well, in fact that's exactly the issue we have on several of these. We've identified, or NIOSH has identified, that they cannot reconstruct internal thorium doses, for example. Now, can you ex-- but to what extent can you exclude others from that? In some cases, not very well.

MR. TURCIC: Right.

DR. ZIEMER: On the other hand, like in General Atomics, if you had your cafeteria worker and you knew there was a cafeteria and it's not one of those listed buildings, then you -- they would have to show you that somehow their job required them, for example, to deliver sandwiches to the reactor building or something.

MR. TURCIC: Exactly.

DR. MELIUS: Yeah.

MR. TURCIC: Exactly.

DR. WADE: One question, Pete. These words that we bandy about that say "were monitored, or should have been monitored," these words give you difficulty? Should the Board steer clear of those words? What do you -- what's your thought?

MR. TURCIC: They -- they don't give us any difficulty at all. Like I'm saying -- I mean here -- here's where they came from. What it came from was the original statutory SECs that basically said that you were either monitored or had an exposure similar to individuals who were monitored. Well, that's totally impossible to administer, you know, without a

policy. And so that policy is what got shifted into monitored or should have been monitored --

DR. WADE: Just to --

MR. TURCIC: -- then assuming anyone who should have been monitored under current day requirements.

DR. WADE: A very specific example, if I might. I mean on Allied Chemical, we have a definition in front of us that says all AWE employees who were monitored, or should have been monitored, for exposure to ionizing radiation while working at Allied Chemical Plant in Metropolis, Illinois, period. Another way you could write that is all AWE workers who worked at Allied Chemical Plant.

MR. TURCIC: That -- they mean the same thing, exactly.

DR. WADE: They mean the same thing.

MR. TURCIC: The "monitored and should have been monitored" really plays a more important role when you're talking about a DOE facility. And the reason it comes there is you don't want to drag in -- I don't think you're talking about including the delivery of -- you know, the person that -- that's coming in and -- once

a week and filling up the Coke machines.

DR. WADE: Uh-huh, right.

MR. TURCIC: And they typically wouldn't be monitored, and so, you know, that's how -- how that would be ex-- excluded.

DR. WADE: Just one more --

MR. GRIFFON: So you --

DR. WADE: -- questions --

MR. GRIFFON: -- you don't make a subjective determination on monitored or should have been monitored based on the current radiological standards. You really just say that equals presence.

MR. TURCIC: Yeah, exactly.

MR. GRIFFON: Okay.

DR. WADE: But now when Stu was talking to us, he sort of raised this issue as an important issue.

MR. GRIFFON: Yeah.

DR. WADE: And now I get the sense that maybe it's not an important issue. So I just want to make sure we're clear before the Board takes an action.

MR. HINNEFELD: Well, I hate to -- am I on here? I really hate to confuse the Board

'cause I'm so confused myself, but there are clear differences between the Harshaw Plant and the Allied Plant in terms of what we know and what the condition of the plant was and things like that, and I only pointed that out. I in no way intended to infer that I have any expertise at all in this area, how to administer the class. I just thought that I would point those out in my own way, and I don't -- you know, this is not my bailiwick. I believe I said that.

DR. WADE: Well, thank you. So -- so --

MR. GRIFFON: But -- but --

DR. WADE: -- Pete, in terms of Allied, if I could finish, it makes no difference to you, in terms of the way you would move forward, whether those words appear or not.

MR. TURCIC: Not at Allied, no.

DR. WADE: Okay. Thank you.

DR. ZIEMER: So "monitored, or should have been monitored" really refers to the -- the people who work there, as opposed to somebody coming in casually --

MR. TURCIC: Exactly.

DR. ZIEMER: -- a visitor or --

MR. TURCIC: Exactly.
DR. ZIEMER: Yeah. Here comes Jim. Jim, did you have another --
DR. LOCKEY: Yeah, I just -- I just want to make -- make it so it's clear in my mind. If -- if -- in the General Atomics report, if NIOSH says Building 30, Building 31 and Building 26, 27 should be included in the class, you don't go back and second-judge that. You don't go back and say we're going to look at those buildings separately. You accept that -- is in the petition as people that should be included in that class. Is that correct?
MR. TURCIC: That's exactly right. Then -- then what we do is we start looking and see -- okay, now how and what information do we have to say they worked in, you know, any of those buildings. And then that's an empirical type analysis for a while until we can figure out what is available. We may come to the conclusion that we can't separate them out and we, through policy, say, you know, presence equals -- in those buildings, that presence at this facility equals those buildings. There may be time frames, you know, maybe at some

time frames you can split it up and some time frames you can't. But no, we don't -- we administer whatever the Secretary of HHS issues.

DR. ZIEMER: Larry.

MR. ELLIOTT: Pete, I think it might be helpful for the Board and for the public at large to know that each one of these classes that is designated by the Secretary of HHS -- once you receive that class designation, you process what I think you call a Technical Bulletin that goes out to your claims examiners on how to administer that class --

MR. TURCIC: Right.

MR. ELLIOTT: -- and there are -- I don't know how many of these have been generated up to this point in time, but I'm aware of the ones for Y-12, Mallinckrodt, et cetera. Maybe that's something that you might want to make available to the Board. I don't know how -- how you'd do that, but these exist -- I mean they may --

MR. TURCIC: They're on our web site, Larry.

MR. ELLIOTT: Okay, they're on the web site.

MR. TURCIC: Yeah, they're on our web site, but

I'd be -- I'd be glad to walk you through, you know, each one of them, give you copies of each one of them, the directions that we give to our claims examiners --

DR. ZIEMER: Maybe an -- maybe an example next time would be useful --

DR. MELIUS: I -- I've got an example with me, if I can -- someone wants to make a copy and distribute it.

DR. WADE: Pete, one --

DR. MELIUS: I've got -- I actually -- a couple of them with me, so...

DR. WADE: One more very important issue for at least me to understand, and I -- and I think maybe the Board, is this issue that we've been talking about recently of what NIOSH can do and what they can't do. So for example, let's take occupational medical dose where NIOSH said we can do that.

MR. TURCIC: Yeah.

DR. WADE: Is it important that what they can do be included in the designation?

MR. TURCIC: Makes it a lot easier to -- for claimants to understand. You know, if -- if the designation comes out and says all we can

do is medical X-rays, then if it's -- you know, if that's included, that makes it a lot clearer to the claimant when they get a dose reconstruction for a non-specified cancer, you know, only based on medical X-rays.

DR. WADE: So if NIOSH is saying, for example, as we've done today, that we can do all external dose, we can do internal for uranium, we can do occupational medical, all of that should be in the designation that the Secretary issues and therefore in the Board's recommendation to the Secretary. Okay. Thank you.

DR. ZIEMER: Other comments? Jim, did you have an additional comment? No, okay.

Mr. Miller?

MR. MILLER: Richard Miller. I just have a question about this interchange here 'cause this is a very important issue, and I want to make sure that when you nodded, Pete, that we understood what you were saying. When you said a moment ago, as I understood it, well, it's very important for us to put in the designation what dose we can reconstruct, so let's go through this -- you know, we can do all the

external, then we get to the internal, then you say we should sort out which internal dose we can reconstruct and which internal dose we can't reconstruct. Okay, now we're getting into process-specific, not building-specific, designations. So now we're into that tricky issue we got into with Y-12 where they say you can reconstruct the uranium dose but not the thorium dose. So then the question is who's a thorium worker and who's not a thorium worker. And then you have the great irony, which is without being able to say who's a thorium worker and who's not a thorium worker, or who should have been monitored for thorium or not monitored for thorium, you'd wind up, I would think, with almost an administratively-impossible class to adjudicate unless you provide broad presumptions. And so the question is, why would you want to narrow the isotopes that you can monitor or not monitor for in a class and -- and -- if you want to have clarity about the boundaries?

MR. TURCIC: I think -- I think you're -- you know, I -- I think you're looking at this -- I -- I don't think the way you're looking at

this, Richard, is the way it works.

DR. ZIEMER: No, Pete -- Pete wasn't saying that they --

MR. TURCIC: I'm saying regardless --

DR. ZIEMER: -- pay attention to that. Pete was saying that that helps the claimant understand, if they go back and NIOSH says, for example, we can only reconstruct your medical dose and --

MR. TURCIC: Richard, just because the designation -- let's say the designation said, you know, includes, you know, the -- the write-up says here's what we can do, that doesn't take it away if you meet the class definition based on that facility, regardless -- if you have a presumptive cancer, if you have one of the 22 cancers, you're awarded benefits. Where that becomes important is when we take those who don't have one of the 22 cancers, we send it for a dose reconstruction, it becomes important so that the claimant understands okay, in this case they did include the internal uranium, but they didn't include anything for the thorium; so my exposure was higher, but it did include the inhalation of

the uranium.

MR. MILLER: Okay. Have you issued the guidance yet for the second Y-12 class, the claims examiner guidance?

MR. TURCIC: We're in the process of doing it now.

MR. MILLER: Okay, 'cause that would help understand exactly the explanation here, 'cause what -- 'cause when we looked at the earlier Y-12 class -- of course you weren't grappling with that issue 'cause it was only uranium enrichment in that time period, but -- but what -- what was a bit confusing there was that, for example, those who were not presumed to be in the Y-12 Calutron operations were construction, were machinists, were security guards, for example, where the burden of proof is then going to shift to them to sort of show they were in there. And I guess the question that I had was is there an irony here that's been created? And let me just pose the question. The -- the irony that I'm questioning is, is it possible that we could have people who were put in a class because there's not enough data with which to reconstruct their dose, regardless of

whether it's internal or external, but for which there's also insufficient data for them to put them in the Calutron building or in the RaLa area. In other words, could you have the irony that you could be put in a class, but lack the proof to show you were physically there 'cause the same lack of data catches you.

MR. TURCIC: Any time you draw a line, Richard, there's going to be people on one side of that line or the other. I mean any line that you draw, whether it be --

MR. MILLER: So are you saying that the incompleteness of data about being able to show you were in Building X -- in other words, affirmative proof evidence that you were there -- construction workers particularly face this challenge.

MR. TURCIC: Okay.

MR. MILLER: So a construction worker says I'm in the RaLa area 'cause he files a claim, but he has no contemporaneous evidence to establish proof that he or she was there, are they in the RaLa area or out of the RaLa area? That would be the kind of question I'm posing.

MR. TURCIC: We -- we haven't -- on that one, I

-- I can't say because, you know, we haven't worked out the specifics and don't know -- you know, there are other records. Like for example, we contract with the Center to Protect Workers Rights. Lot of times we can't put a construction worker -- you know, all we know and all the survivor knows is that a construction worker worked for some construction company. Now the records we get from Center to Protect Workers Rights would come back that maybe dispatch workers that show that okay, this (unintelligible) -- this individual worker was dispatched to Building 92 -- 9202 at Oak Ridge. So I mean it just -- it -- it's all --

MR. MILLER: But if it -- but if it only says I'm going to Oak Ridge and not 9202, what do you do?

MR. TURCIC: Well, it depends on -- okay, you know who the construction company was. If that construction company had a job during that time period there, we would assume that, okay, he could have been assigned there.

DR. ZIEMER: Well, these -- these are fine points, but we understand the general issue

here and I think that's helpful, and we need to move on and not linger on the -- 'cause these are case by case things.

MR. TURCIC: Yeah.

DR. ZIEMER: I think we understand the principle. Yeah.

MR. TURCIC: Richard would -- Richard would be a hell of a claims examiner.

DR. WADE: It is an evolving art that we have to continue to --

DR. MELIUS: Is that a job offer?

DR. ZIEMER: Okay, Mark has a comment or question.

MR. GRIFFON: Yeah, just a -- just one more thing, and -- and I think the Y-12 example might actually clarify this. I agree with Richard, I was going to ask where that was. But the -- the "monitored, or should have been monitored," I think we just said that eq-- that equates presence.

MR. TURCIC: That's (unintelligible) --

MR. GRIFFON: But if -- but if we have a write-up where we have external versus internal and we say monitored or should have been monitored for internal, then that doesn't necessarily

equate presence, does it, 'cause you can do external. You're -- you're split-- it's not just simple presence at that point, is it, or -- I guess it'd be a site-by-site basis.

MR. TURCIC: I think it would be the same thing. I mean --

MR. GRIFFON: Still just presence.

MR. TURCIC: Yeah.

MR. GRIFFON: And then what if you said monitored or should have been monitored for thorium? That, in my mind, doesn't necessarily mean just presence.

MR. TURCIC: It would be the same -- it would be the same thing. I mean if -- what it does, Mark, is if you look at the thorium, okay, in that example, that at least gives us a basis to start saying well, we know that these occupations -- there were -- there was internal monitoring. Not for thorium, but there was inter-- so that gives a conclusion that here's a whole bunch of occupations that you know, you know, fit into that category. And then -- so it's really, you know, doing it piece by piece and...

DR. ZIEMER: Okay, I think probably we've

exhausted this issue for now. I think we have a feel for the issues. We'll look forward to following up on some of these in the future. Thank you very much, Pete.

We do -- we are going to recess shortly. A couple of housekeeping things. I want to remind Board members that one thing on our docket will be approval of some minutes tomorrow. You have them in your packet and I just want to give you a heads-up to be prepared to act on those minutes. If you haven't already had a chance to read through them, that will be your task for this evening.

We also have the public comment that begins at 7:30. Lew, do you have any additional items to --

DR. WADE: Well, only to thank Pete, and this issue of the writing of designations is really a developing art, and -- and I think we need to learn to do it better and I think you've been immensely helpful, Pete, in terms of getting us there.

DR. ZIEMER: Okay. Thank you. With that, we'll recess until 7:30. Thank you very much.

(Whereupon, a recess was taken from 5:06 p.m.

to 7:30 p.m.)

PUBLIC COMMENT

DR. ZIEMER: Actions were taken earlier today by the Board, particularly with respect to the Blockson SEC petition, so let me briefly describe what happened earlier today.

The -- the staff members from NIOSH presented what is called the Petition Evaluation Report. Hopefully those of you from Blockson have had a chance to see that report. Then the petitioners also had a number of representatives here to speak on their behalf and -- and raised a number of points. Amongst those who also spoke on behalf of the petitioners was Senator Obama, who raised a number of points, as well.

The -- the issues raised by both the Senator and the other petitioners -- a number of those issues the Board discussed in some detail, and after lengthy discussion there was a formal motion that passed by the Board to postpone the decision on Blockson until several of the issues that had been raised by the petitioners and by the Senator could be addressed. These included the following: A clarification of the

-- what is called the source term, or the amounts of uranium or other activity present on the site. Secondly, a request that there be a formal worker outreach meeting held by NIOSH to gather formally information from Blockson workers, and NIOSH has committed to doing that. Thirdly, amongst the points of the motion, that the Board establish a working group that would work together with the Board's contractor, SC&A, to clarify some of the other issues that had been raised, most particularly the issue of radon exposures, but also some other related possible issues that had been questioned by the petitioners.

So the status at the moment then is that a -- a final decision on the recommended SEC evaluation by the -- by the NIOSH staff has been delayed at least until the next Board meeting that we -- we don't have a definite timetable yet because it's unknown how long it will take to gather all the information, but -- and we're hoping to do -- and some of the petitioners have helped -- have agreed to help us try to locate some of this information, as well. But pending the obtaining and evaluation

of the information that the Board wishes to examine prior to making a decision, that decision will be at least temporary -- temporarily delayed. And I might point out that -- that Senator Obama himself had requested such a delay.

So with that as background now, we will open our public comment session. This is not restricted to only the Blockson issue. There are -- actually we have a number of petitions and -- and -- petitions and dose reconstruction issues before the Board and some -- some site profile issues, as well. And we have made a commitment to one individual to speak to -- in the public comment session to speak to the Board by phone, and that is Ms. Terrie Barrie from the Rocky Flats area, Denver, and I need to find out if Terrie Barrie is on the line. Terrie, are you there?

MS. BARRIE: Yes, Dr. Ziemer, I am.

DR. ZIEMER: Can we raise the volume there a little bit? Terrie --

MS. BARRIE: Can you hear me?

DR. ZIEMER: -- I think we hear you. Could you try again?

MS. BARRIE: Dr. Ziemer?
DR. ZIEMER: Yes. Terrie, is that you? If -- if -- is that Terrie? Terrie, can you hear us?
MS. BARRIE: Hello?
DR. ZIEMER: We're not hearing you. Hang on. And then -- do I need to move -- Terrie, can you hear me now?
MS. BARRIE: No, I can't. I can barely hear you, Doctor.
DR. ZIEMER: Okay. Well, we can hear you now, Terrie, so if you would proceed, just speak into the phone and we're prepared to hear your remarks.
MS. BARRIE: Okay. Thank you so much. Good evening, Dr. Ziemer, members of the Board. My name is Terrie Barrie and I'm with the Alliance of Nuclear Worker Advocacy Groups. And once again I'd like to extend my appreciation to you, Doctor, for allowing me to call in my comments tonight, and to NIOSH for arranging this call.
One week ago the House Judiciary Subcommittee on Immigration, Border Security and Claims held their fifth oversight hearing on EEOCAPA (sic). Shelby Hallmark of the DOL's Office of Worker

Compensation Program testified that the motive for DOL's involvement in technical documents was to ensure that NIOSH's program was administered in a fair and consistent manner. I am afraid that this policy has failed with the Rocky Flats petition. For instance, workers at the Y-12 facility was awarded SEC status if they worked with thorium during certain years. In that petition NIOSH asserted that they could not reconstruct dose because they did not have access to enough data. NIOSH's evaluation report did identify years, process and buildings where thorium was present at Y-12, as well as a broad guesstimate of the amount of thorium there. Generally thorium was used at Y-12 for research and development activities.

NIOSH determined that this information was not enough to reconstruct dose with reasonable accuracy. As far as I can tell, NIOSH has less information on thorium for Rocky Flats facility than they did for Y-12, yet they claim they can still reconstruct dose for thorium workers at Rocky Flats. NIOSH concedes that there was light machining performed at Rocky Flats, as

opposed to research and development activities at Y-12. One method NIOSH proposed to reconstruct dose was to utilize gross alpha readings. Yesterday the idea of treating thorium machining the same way they do uranium machining in the TBDs was introduced.

I ask again, why were these methods not applied to the Y-12 workers if gross alpha data and uranium machining data was available? This is not consistent nor fair.

During the debate of the IAAP SEC petition -- that's the Iowa Army Ammunition Plant -- an issue was raised on the radon levels NIOSH used for that facility. NIOSH chose to use data from the Pantex plant, which was a lower level than what was actually at the Iowa facility. But the rewritten introduction for the Rocky Flats site profile issued November 30th of this year states that, and I quote, (reading) Radiation from naturally-occurring radon present in conventional structures, end quote, are not considered occupational exposures. And now I understand that radia-- radon exposures is being considered for Blockston (sic).

Iowa had similar levels of naturally-occurring

radon at Rocky Flats. How could radon levels be included for one facility and not for Rocky Flats? This, too, is not fair nor consistent. These two examples demonstrate that NIOSH is not being fair and consistent in their evaluations of the Rocky Flats SEC petition. Serious doubts remain among the Rocky Flats claimants on their ability to reconstruct dose with reasonable accuracy. What is fair for one site should be applied to other sites. Unless of course the records definitively prove otherwise.

Rocky Flats claimants feel that they have not had a fair shake in this process. The affidavits supplied with the petition and public comments are termed "allegations," whereas NIOSH's explanations are expected to be accepted as the truth.

Time and cost involved for evaluating the Rocky Flats SEC petition has been raised many times. Two years, or almost two years, is a long time. Last month's denial of access to the O drive delayed progress of SC&A's investigation. At one working group meeting I heard NIOSH or the ORAU team member ask if the time spent on the

thorium issue was worth it as perhaps only 20 -- or 12 workers were involved. It certainly is worth it if any one of those 12 workers develop a compensable cancer.

Who is suffering here from this elongated process? The claimants, the folks who thought that working at the Rocky Flats facility was a patriotic duty, whose bodies were bombarded daily by high levels of radiation. And at Rocky Flats, those levels were high.

I hope the Board will consider what is fair and what is consistent when deciding on the Rocky Flats petition. I look forward to the February meeting.

On another note, I do want to thank NIOSH for appointing Denise Brock as the ombudsman for dose reconstruction claims. I know she will do well. I urge NIOSH to update their web site as soon as possible to post her contact information and responsibilities so that any claimants who have problems will have a point of contact.

Thank you again for call-- for allowing me to call in this comment.

DR. ZIEMER: Thank you very much, Terrie. We

appreciate your comments.
We'll continue now with comments from those here in attendance. I may have trouble reading some of your names, so forgive me if I don't pronounce them correctly, and I'll just take them in order as they have appeared on the sign-up sheet.
First Joshua -- is it Lott? Joshua Lott? It looks like L-o-t-t.
(No responses)
No? Okay, let's go on -- and this is someone who's with Reuters.
(No responses)
No? Okay. Now the next one I'm really having trouble reading. It looks like it could be -- is that a -- what do you think? Is that Charles? Last name looks like it begins with an O.
DR. WADE: I would guess Charles S. Otere -- Oter?
(No responses)
DR. ZIEMER: Not close. We're obviously not reading it well. Maybe we'll --
DR. MELIUS: Who else do you have?
DR. ZIEMER: We may skip ahead and then if you

feel like you were left out, we can come back. I'm sorry.

George Luber? I think George was with us yesterday and -- welcome back, George.

MR. LUBER: George Luber, and I thank you for leaving me speak today's -- this evening. I'm going to explore this book that was given to you yesterday. The -- I take my glasses off to read. I read the whole document this morning and these are some of the things that I -- I came up with. And I numbered each page, starting with the first white page, which is numbered one, and numbered them from there on back.

Page number 12, internal exposure to radiation. When you -- we talk radiation, we don't all necessarily speak of the two Betatrons. We also talk about the cobalt-80 unit, the small cobalt unit, and there was a couple of other radioactive sources that I was not real familiar with because I was not licensed to use them.

On page 18, persons present, Joe Poole on the Betatron controls, which is on page 18, which is this picture here. We're shooting the axle

housing, of which there were four, for the largest strip mine crane in the world. Joe's on the controls of the Betatron. I'm checking the distance on the casting, and the operator was Steve Conage* and he's on the end of the casting. If you look at me real close, I'm filthy dirty. I'm coal black 'cause I crawled in that axle on my hands and knees. This is one of the dirtiest, filthiest castings we ever worked on. The portion we were shooting was the connection between the axle and gear box. That was an hour to an hour 15 minute, full speed on the Betatron. If we were lucky, we got six shots in eight hours.

On page 23 -- on page 23 Rudy Willey* and myself were shooting a Westinghouse valve. Rudy was my wet -- my mentor. He's being treated for lung cancer right now.

On pages 27 and 28, these cassettes which are pictured are 14 by 70. They were loaded with multiple speeds of film for areas of multiple thicknesses. In the case of the shot exposure site, the shot time would have been in excessive (sic) of one hour at full speed of the Betatron. In the case of this casting, the

same cassette -- or the same cassettes have been reloaded and used two or three times in the same eight-hour shift. Now these are stainless steel, and I think there's some term that the types of metal in the cassette also become radioactive, so we guys handled these -- these cassettes, the same cassettes, many times in eight hours. The next shift used the same cassettes and the next shift used the same cassettes -- same cassettes on the following day, same cassettes. So some of these -- some of these metal cassettes can -- can be -- could have been hotter than a firecracker.

On page 31, active beta material and removable contamination. In my case, and many other of my fellow department persons, would work 16-hour days, eight hours on the Betatron, eight hours out on the floor where we did magnaflux work, spot check weldings, so on and so forth. The -- out on the report -- repair floor where the chipping, burning, grinding and welding were done in filthy, dirty working conditions. Number 9 building would be cleaned with electromagnet hooked to the crane and drug back and forth to pick up the metal so the janitor

could sweep the floor. It was not uncommon to see six inches of trash and dirt on the floors. If we needed to move a magnaflux machine, which has -- what should have been a moveable, by hand, machine, we had to get a crane to pick it up and move it because you couldn't move it with so much dirt and dust and filth on the floor. By the same token, it wasn't uncommon to see trash barrels catch on fire because they were so full the janitors couldn't get to them to empty them. So when you talk about the filthy, dirty working conditions and the radioactivity that was produced in the Betatrons, and the castings that moved all over 8, 9, 10 building, 6 building, it pretty well -- that dust and dirt was carried, radioactive, all over the plant. This is one thing that we need to understand.

Westinghouse turbines would have anywhere from 200-plus shots on a green shot -- on a green casting. The casting may come back into the Betatron five or six times for repair checks of the individual shots that were repaired. So when you talk about dust contamination, et cetera, with the casting going in and out of

the Betatron, where did all this dust go? Especially us magnaflux guys.

When ma-- maybe I need to explain what magnaflux is. It's nothing more than two prods set on a casting and you magnetize a given area with two prods. You spray this powder on there and if there's a crack -- like you can do with most anything -- that powder would form on the crack because that's the -- that was the jumping point between the two poles. And when we get finished, we take an air hose and blow it off, all over the plant. So when you -- when you talk about radiation exposure with the castings going in and out of the Betatron, being dirty with metal dust, and then we blow if off out in the plant, where does this dust all go?

Rudy -- Rudy -- okay, I'm going to give you my written presentation here and this is a diagram of the entire plant. I don't know if you gentleman have them or not, but this --

DR. ZIEMER: Is that in the book we got, or is this --

MR. LUBER: I don't think so.

MR. CLAWSON: (Off microphone) (Unintelligible)

in the first book, though? It's not in --

MR. LUBER: It might have been in the first book, yeah.

MR. CLAWSON: (Off microphone) (Unintelligible)

MR. LUBER: But given -- given the -- the time period from the cleanup in the new Betatron and the old Betatron, 20 years after the plant was closed down and there was still radiation present, to me brings up a big question mark. How much radiation was there really there when the plant closed? Knock on wood, I'm in pretty good shape yet. Maybe I'm one of the lucky ones. That's the end of my comment.

DR. ZIEMER: Thank you. George, when -- when you and your colleagues were doing the radiographs, and I think you describe them as being as long as one hour or greater, where were you located relative to this -- the Betatron target? Did they move -- were you moved behind any shielding materials, or just moved away some distance, or what --

MR. LUBER: The -- the shooting room in both Betatrons was in a -- well, shall we say a pea fashion. You had a big shooting room with a rail transfer car coming in on one end, but we

sat in the control room, which was on the -- in the corner of the L of the casting room and the transfer area. The -- there again -- I'll give you one more example.

The one day I was operating I came in at 3:30 in the afternoon. I made a couple of shots, short shots. And when I came back in I noticed there's a pallet of film sitting here in the shooting room, right next to the rail -- or the transfer tracks. And I guess there was probably 30 or 40 boxes of X-ray film on that casting -- or on that pallet. So I called the foreman and had him come and get it out of there. That film wasn't supposed to be in there.

So there was one of the boxes that was -- we opened and checked the film to see if it was damaged in any way. One of the boxes we opened, nearest to the exposure room, the edges of that film was burnt, around the edges of the boxes, sitting probably 50 feet away from the Betatron. Okay. How far does this radiation go in that building when that cassette was -- or that pallet of film was sitting 50 feet away and it was burnt around the edges. The company

went ahead and used it because it was only damaged around the edge.

DR. ZIEMER: Okay. Thank you.

MR. LUBER: But it leaves big question marks.

DR. ZIEMER: Yeah.

MR. LUBER: The same way -- one of the guys I was working with who was a -- had authority to use an 80-curie source of cobalt, and we shot the weld prep of the channel head, which is the cap of a nuclear power plant. You shoot this complete weld prep 42-inch -- or 42 film around the edge, flex film; you tie it with a strap, you set the cobalt unit up in the middle and you shoot all 42 shots at one time. The operator wouldn't block the case. The controls were in the operating room. But anybody'd turned that crank in the shooting -- in the operating room, we'd have been exposed. I chewed his ass out and he was unhappy. But 80-curie source is about as big as a pea. A lethal dose is three minutes. Three minutes. You don't die tomorrow; you die six months later after you suffered for six months.

So when you talk about all this radiation and all the dust and dirt that was in the plant, it

gets to be pretty scary. And like I say, I think I'm one of the lucky ones that I haven't -- doesn't have cancer yet.

One of the other things when -- when working in magnaflux, which is metallic dust, you didn't wear a shirt like this in the summertime because you could take many baths as you want, showers or whatever, but if you sweated, this shirt would turn rusty. This was metal dust that was in your pores that you could not wash off. It was also radioactive. So there's -- there's lot more questions here than there are answers.

DR. ZIEMER: Very good. Thank you, George. Appreciate it.

MR. LUBER: Thank you.

DR. ZIEMER: Lois P-i-r -- P-i-r -- is Lois -- any -- any Loises here? How did we get so many --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: I have you separately, Louise. I -- I have your name on here, but this is -- this is a Lois.

UNIDENTIFIED: (Off microphone)

(Unintelligible)

DR. ZIEMER: This is definitely a Lois -- or it could be Luis, I suppose, who -- who identifies herself as a claimant -- looks like P-i-r-c. Okay, let's -- let's go on. Mary Beth Charley, and Mary Beth was with us --

DR. WADE: Spoke earlier.

DR. ZIEMER: -- yesterday, but is Mary Beth --

DR. WADE: No, she spoke today, just before the break.

DR. ZIEMER: Oh, she's the one who spoke before the break, yes, so we have her already. How about Mary Gates -- perhaps it's Mary Lou Gates?

(No responses)

Hmm, okay. How about Rosemary Bell Malone?

(No responses)

Have we lost that many that fast? Okay. Bev Marcoski? Yes, Bev -- and Bev we've had before. She's still here. Okay, Bev.

MS. MARCOSKI: Actually I came back. I had to go home and work out and air my brain after all those tough sessions, so --

DR. ZIEMER: Thank you for coming back, so...

MS. MARCOSKI: Again, Bev Marcoski. My father

worked for Blockson Olin Chemicals. I had a few more thoughts. A lot of these things I'm going to present I have talked to Mr. Thomas about -- Tomes, however you say his name -- and I addressed a couple of memos to him directly. I'd like to talk about the general assumptions in the Technical Basis Document versus speci-- being more specific, specificity. And I have about seven points I want to make, and I'm going to be very brief, and they relate more to my father's job or occupation.

So point one -- and some of these things have been said before -- is the 2,000 hour assumption in the SEC document and in the Technical Basis Document 2. Basically we all know that's 40 hours a week times 50 weeks, allowing for about two weeks vacation. In my father's case I have his pension master, and I have the last six years of how many hours that he worked overtime, and overtime is something that he did frequently that I do remember. He had a max of 2,603 hours. That 600 out of 2,000 is roughly a third more time spent working routinely. Again, as we've talked before, the data is sketchy. It's only the

last six years of his employment, through 1982. Going before that it's not specific how many hours worked in a year. So again, there's general assumptions made on the 2,000-hour work year.

Point two deals more specifically as his -- what he did. He was a handler of the drums. He was a loader, mover of these materials in Building 55, so he actually touched those drums. And it was brought up earlier by Mark Griffon that that's 150 millirems of exposure you're talking, versus two millirems at one foot away times 40 hours. So again, not specific enough for what he did to get an accurate calculation on exposure.

Third, in his later years with Olin Chemicals, he was a welder. They chose type M wave. I believe there's F, M and S are the choices for the radiation, and I did talk to Mr. Tomes about this and he said M was their choice. In the Technical Basis Document it says that there's a type S wave that has to do with high-fired materials. The type S wave leaves the lungs much more slowly than the type M waves. Again, being more specific to my father's job

as a welder welding with pipes that have phosphoric acid in them, I'm not sure that's specific enough to his job type just to assume type M versus type S 'cause he was working with high-fired materials.

Again, point number four, just to get technical, shoveling is not used in Technical Basis Document 2. They assume a hopper, based on what other plants used, and then -- but they have people stating that sometimes they thought it was shoveled, the uranium or the yellow-- yellowcake, so they kind of contradicted themself (sic) in the SEC petition this afternoon, saying they used shoveling. But if you read Technical Basis Document 2, page 7 of 27, it shows that they assumed a hopper.

I guess point five, again I touched on the radon. I don't think I need to go into a lot of detail. Again, it was calculated in Technical Basis Document for 1952 to 1962. There was nothing given for its association with the residual contamination. Again, my father worked there for 30 years, so that's 20 more years of exposure.

Point six, they assume these were production

workers, and the assumption that goes with that is light work. And along with that is another assumption of how much picocuries a day. I question that assumption, again, with Mr. Tomes in my one-on-one memos to him. It was a .2 picocurie a day based on 70 percent light exercise for the production workers. Again, not specific. My father was, again, I would call a laborer or a heavy worker, moving drums that could have weighed 1,000 pounds, and welding equipment that weighed probably well over 100 pounds. That categorizes as heavy work and that would increase the respiration intake along with this, but it wasn't accounted for. Again, general, not specific to the job task.

Point six -- that was six; seven, the data -- the bioassay early in production, the yellowcake -- or the exposure was much more dangerous as production went on, and I'm wondering if the bioassays are from the early years and not when the radioactive daughters could have been more potentially hazardous to these people, and so then questioning the validity of the earliness of that and if there

were things closer to 1962.
And I guess lastly, sciences and the data, and all the steps I believe should be followed in this production of the uranium, not limiting it to Building 55, but looking at what it took to -- the whole process, and to follow that.
Thank you.
DR. ZIEMER: Thank you. And Bev, I might mention -- and NIOSH people can help me if I'm incorrect, but it's my understanding that -- that the Department of Labor, when they look at the -- the 250-day issue or the sort of the 2,000-hour year issue, that they actually are in a position to do some weighting if they have evidence that individuals worked longer work weeks. And I'm -- I think I've interpreted that correctly.
Larry or one of the NIOSH people -- or maybe someone from Labor -- is -- is Pete still here? Okay, Stu Hinnefeld. Now I -- whether or not they're able to do that on an individual basis -- we know that -- they have told us that they -- they can do weighting, and apparently do weighting, where they have evidence to that effect. But Stu, can you address that for us?

MR. HINNEFELD: Well, what you're talking about is in ar-- in arriving at 250 days for SEC --
DR. ZIEMER: Yeah, for --
MR. HINNEFELD: -- qualification in terms of time period.
DR. ZIEMER: -- the 250-day issue, but --
MR. HINNEFELD: I think the issue here might be --
DR. ZIEMER: -- here might be the model that's used for --
MR. HINNEFELD: Yeah, I think this is a question about, in the dose reconstruction model, is the 2,000 hour per year of intake because it's an intake rate --
DR. ZIEMER: Right.
MR. HINNEFELD: -- (unintelligible) intake rate --
DR. ZIEMER: Right.
MR. HINNEFELD: -- and should that number be adjusted upward seems to be the issue here.
DR. ZIEMER: Right.
MR. HINNEFELD: So it'd be something to be pursued.
DR. ZIEMER: Right.
DR. CASE: (Off microphone) (Unintelligible)

DR. ZIEMER: Oh, right, okay. Now we'll hear from Labor.

DR. CASE: Dianne Case from Department of Labor, just to speak to the 2,000 hours per year. Again, at any sites, if the claimant has additional information at the time the recommended decision has been issued, they can always bring up information that they may have -- other evidence that, say they worked longer --

DR. ZIEMER: Right.

DR. CASE: -- periods of time, that can be adjudicated.

DR. ZIEMER: If it were an SEC issue, you could weight the -- to meet the 250-day requirement.

DR. CASE: Well --

DR. ZIEMER: Okay.

DR. CASE: -- 250 days is 250 days.

DR. ZIEMER: Well, I think we've been told that if there were evidence that -- no? Am -- am I wrong on --

UNIDENTIFIED: You're right.

DR. ZIEMER: We -- we've been told that Labor will weight -- if there were evidence that -- that a given worker worked, for example, 12-

hour days --

DR. CASE: Yeah, that --

DR. ZIEMER: -- they would take whatever -- 250 times eight --

DR. CASE: Right.

DR. ZIEMER: -- to get the right number of hours, yeah.

DR. CASE: Yes.

DR. ZIEMER: Okay. Thank you. Okay. And also, Bev -- I think you were here earlier -- you're aware that we are looking into the radon issue, as well, with the help of our contractor, so hopefully we'll be able to clarify that further, as well, and some of these other issues we've gotten notes on them, so thank you.

DR. LOCKEY: I have a question.

DR. ZIEMER: Oh, a question, yes.

DR. LOCKEY: Yeah, one -- one question --

DR. ZIEMER: Dr. Lockey may be --

DR. LOCKEY: Larry, in that case where somebody is working 2,600 hours a year, is that additional information they can submit to NIOSH for the dose reconstruction and that is taken under advisement?

MR. ELLIOTT: Yes, we would -- we would love to hear that kind of information in the interview. If it doesn't appear at that point, there's another opportunity for an individual claimant to speak about whether the dose reconstruction included overtime or not, and that would be at the closeout interview. We'd hope that they would bring it up at that point again and so we could address it properly.

DR. ZIEMER: So if a model were used based on a 40-hour week and you had evidence or an affidavit that the person worked 80-hour weeks or something, you could --

MR. ELLIOTT: Yeah --

DR. ZIEMER: -- adjust --

MR. ELLIOTT: -- you know, we could adjust -- we can adjust. We'd also -- there's an -- you know, at the appeal point, when they get a recommended decision from DOL, they have another opportunity to express their concerns about how their dose was reconstructed and whether or not it was accounted for, excess overtime work.

DR. ZIEMER: Thank you. Yes, Bev, do you --

MS. MARCOSKI: I did bring that up with Mr.

Tomes -- I did bring that up individually with Mr. Tomes in a conversation and then in a -- a memo, and his response said it was -- the upper limit of 95th percentile covered that excess, but I wasn't following it. That's why I thought I should bring it up to this Board. I disagreed.

DR. ZIEMER: Well --

MS. MARCOSKI: And I didn't bring it up in my exit interview -- yeah, and I didn't bring it up in my exit interview because I thought that it was closed, that that was it, but I am pursuing further with the Department of Labor.

DR. ZIEMER: Okay.

MS. MARCOSKI: Because it was so close to the cutoff.

DR. ZIEMER: Yeah, understood. Thank you. John Ramspott, and John we heard from yesterday and pleased to have you back again.

MR. RAMSPOTT: Thank you.

(Pause)

My name's John Ramspott and I'm representing and working with General Steel Industry employees. When I signed in this morning I asked the young lady if I could read two

letters from claimants that weren't able to attend and asked me to read this for them on their behalf.

One of them I'm going to read first, that's from my wife, Christine Ramspott, who is -- her father worked at General Steel Industries and she's official representative for her mother, Ruth.

(Reading) Dear Sirs, Madams, since I'm unable to attend the meeting this week, I'm asking that my husband, John Ramspott, make a brief public comment on my behalf as the official representative for my mother, a claimant under the program. I again ask for your assistance. The issue of correctly naming the place of employment for which my father worked has still not been totally resolved. My father worked for General Steel Industries in Granite City, Illinois, for over 35 years, as did his father. Under this program, as of Saturday, December 9th, 2006, the DOL web site still lists this facility as Granite City Steel, which was a totally, completely different company located across town from where my father worked. Additionally, this information is also wrong in

the *Federal Register*. It is only partially correct on the DOE web site. Generally claimants for this facility are elderly and not particularly knowledgeable about computer usage. Most searches would start with the Department of Labor. If the potential claimant can't locate the name of his or her place of employment, the search generally stops. This doesn't seem to be fair and equitable, in my opinion. I also question how other claimants across the country are getting necessary information if they work at a company that has had several name changes over the years.

My husband John and I have made several attempts to correct this naming issue. It was first brought to the Board's attention at the Westin Hotel in August 2005. Shortly after this issue was personally brought to the attention of Mr. Peter Turcic at a meeting in St. Charles, Missouri. The problem was also discussed during our telephone interview with ORAU November 2005. It was part of the workbook that we wrote and distributed to the members of the Board and other responsible officials. The name issue and request for a

change was also presented to the Board at the meeting in June 2006 held in Washington, D.C. After this meeting, my husband and others had a phone conversation with Mr. Turcic about several concerns regarding General Steel Industries, including again the issue and necessity of the name being listed correctly on all government resources.

We have recently been working with officials of the United States Steelworkers Union in Granite City. We provided the union and its retiree association with the three names of former workers from General Steel Industries which were given to our workgroup by NIOSH. These workers had completed dose reconstructions along with denials. These individuals are now deceased. Thus we were allowed to have their names. We have been told by the steelworkers' organizations that they are 99 and nine-tenths percent sure that these individuals never worked at General Steel Industries and were in fact known to them as long-time employees of Granite City Steel. We both feel that perhaps the site naming confusion may be the reason for this dose reconstruction activity on ineligible

claimants. If this occurred, as we suspect, it would certainly be proof that the correct name change issue must be resolved.

I would like to request a formal reply to this issue as further contact with these families is planned in light of the new radiation source information which we believe now must be taken into consideration as required by the EEOICPA program.

As an educator for over 30 years, I respectfully assign you guys some homework.

Can you help me? And we really --

DR. ZIEMER: Okay. Before you read that other letter, let -- let me ask a question. What -- what is the name that NIOSH is using to identify this site? Is it -- is it Gen-- it's General Steel? NIOSH, do we -- do we know -- I recall this coming up before and I'm puzzled why we --

MR. RAMSPOTT: It's like a bad penny.

DR. ZIEMER: -- haven't resolved it, so what -- what has happened is some people have been told that they are not eligible because they (unintelligible) --

MR. RAMSPOTT: Or mail comes to them that says

they worked at Granite City Steel. They've had to argue with interviewers to convince them. I've had people told sorry, you're talking about the wrong site; that's not even part of the program. And this has gone on for a long time and --

DR. ZIEMER: In -- in the official list of eligible sites, what is listed there? Do we know that, as a starting point? In the original legislation that --

MR. RAMSPOTT: Yeah, it -- it says Granite City Steel. It's the wrong name. *Federal Register* is wrong. I'm real familiar with Peter Eisler. It's -- it's wrong there, too.

DR. ZIEMER: If it's wrong in the *Federal Register*, that's -- that's a -- a major problem, isn't it?

MR. RAMSPOTT: Yeah. I just looked it up on the Internet and it's wrong.

DR. ZIEMER: Okay. Okay.

MR. ELLIOTT: I can't answer your question right now; I don't have my book with me that would list this particular site. All I can say on this topic is that we reconstruct doses for those individual claimants that DOL finds

eligible to send to us.

DR. ZIEMER: Yeah, I -- I understand --

MR. ELLIOTT: It's not our responsibility to question whether or not we've got the right --

DR. ZIEMER: Yeah.

MR. ELLIOTT: -- person from the right site, and I understand --

DR. ZIEMER: It sounds like --

MR. ELLIOTT: -- the problem here.

DR. ZIEMER: -- Pete may have made a commitment to -- to do something and -- I'm wondering if -- if the fact that it got --

MR. ELLIOTT: Laurie tells me that in our system of documentation that we use, we've changed the name to GSI, but that's not -- am I -- did I get that right?

MS. ISHAK: We -- we change the -- the cases --

DR. ZIEMER: To General Steel Industries?

MS. ISHAK: We change ours to General Steel Industries, GSI, in NOCTS. I know, only because I've been working with John on this issue, and Dr. McKeel. And I know we've had some e-mail contacts about how we have changed it to General Steel. And then there was some confusion about whether the cases we have done

dose reconstructions for actually were for GSI employees. So I know we changed the name in our system, in NOCTS, and --

DR. ZIEMER: But if we don't catch it in advance at the Labor side, we have a problem and --

MR. RAMSPOTT: And they don't get to you unless they (unintelligible) --

MS. ISHAK: That I don't know.

MR. RAMSPOTT: -- right site.

DR. ZIEMER: We're going to try to follow up on this.

MR. RAMSPOTT: We're just asking for some help on it 'cause --

DR. ZIEMER: Yeah.

MR. RAMSPOTT: -- it did get corrected partially.

DR. ZIEMER: Yeah. I think NIOSH has tried to do the right thing here and I -- I suspect if it started out wrong in the *Federal Register* that we -- we've got a problem.

MR. RAMSPOTT: Well, it got -- it did get corrected on the DOE site, to a -- a point. It says some radioactivity -- or some work was done for Granite City Steel --

DR. ZIEMER: Okay.
MR. RAMSPOTT: -- at General Steel. Well, that's totally wrong, too, 'cause they -- Granite City Steel never had anything to do with --
DR. ZIEMER: Mark -- Mark has pulled out the *Federal Register* for me, and as you have indicated, it -- it says Granite City Steel.
MR. RAMSPOTT: Yeah.
DR. ZIEMER: Yeah. So you know --
MR. RAMSPOTT: It needs to be fixed.
DR. ZIEMER: So this -- this is what Labor is working off of, it would appear, so -- okay.
MR. RAMSPOTT: If it could be fixed 'cause these people turn away a lot of times. They just quit. They've been told no and you're at the wrong site and --
DR. ZIEMER: Thank you for reminding us of this issue --
MR. RAMSPOTT: Okay.
DR. ZIEMER: -- John. I know you've brought it up before, and I think we thought it had been corrected, but it obviously has not. You may proceed.
MR. RAMSPOTT: And I --

DR. WADE: Wanda has a question.
DR. ZIEMER: Oh, Wanda.
MS. MUNN: Yeah. My question is, were there in fact two sites which may have been AWEs? Might work have been done at both sites, or are we --
DR. ZIEMER: Do we know --
MS. MUNN: -- assured it's only one?
DR. ZIEMER: -- the answer to that or do you know for -- do you know that they weren't eligible?
MR. RAMSPOTT: Absolutely. Granite City Steel was a totally different company. It's never been on any of the *Federal Register* lists whatsoever correctly. There was no work done for the -- you know, for them. The only thing we thought that could have maybe happened is that -- and there -- there are four people involved. Three of them we were given their names. And with the union telling us nah, these guys never worked at General Steel -- let's say they worked one year, the 250-day -- and again, we're not trying to beat a dead horse. We'd like to try and locate these people 'cause we think some things are going to change now 'cause looking at the dose

reconstructions, no Betatron was mentioned, no cobalt was mentioned, no radium was mentioned, activation's never been mentioned, and these people are probably entitled to a new dose reconstruction, I would think, so it'd be kind of nice to find those families so they can ask for that 'cause they've been denied. And it's also -- the other reason -- I don't know what a dose reconstruction costs, but it could be a waste of money if they're doing any more. Those four were done for maybe people that didn't work there and we would really like to see that money spent on somebody who is eligible because --

DR. ZIEMER: Okay, Stuart has a comment here, maybe --

MR. HINNEFELD: Wanda, with respect to your question, the confusion arose because -- now correct me if I'm wrong here, John -- Granite City Steel bought the property that GSI had used to do this work, later on. Is that true?

MR. RAMSPOTT: Partially. The parent company of Granite City Steel is National Steel --

MR. HINNEFELD: Uh-huh.

MR. RAMSPOTT: -- so if that was the reason, it

would probably say National Steel --
MR. HINNEFELD: So --
MR. RAMSPOTT: -- instead of Granite City Steel.
MR. HINNEFELD: -- there was some combination of these --
DR. ZIEMER: Okay, so it's even more confusing --
MR. HINNEFELD: -- later on after (unintelligible) --
DR. ZIEMER: -- than we think.
MR. HINNEFELD: -- (unintelligible) work --
MR. RAMSPOTT: (Off microphone) (Unintelligible) work.
MR. HINNEFELD: -- and the remediation work that was subsequently done at what was the General -- City or -- General City Steel -- GSI, General Steel, when the work was done it was GSI. By the time the remediation work was done later on, the DOE referred to it as the Granite City Steel property. So I believe that's the origin of the original confusion, but there doesn't seem to be any indication that Granite Steel Company and the facility -- the different facility that they operated in

Granite City ever did any AWE work. The work was done at GSI.

MS. MUNN: So I guess the real basic question is, we're sure we have the right site, whether we have the right name or not.

MR. HINNEFELD: The GSI site was the --

MS. MUNN: We're on the right site.

MR. HINNEFELD: Yeah, the GSI site was where the AWE work was done.

MR. RAMSPOTT: If the address is right, the address is --

MS. MUNN: Very good.

MR. RAMSPOTT: -- General Steel, it just has the wrong name on it, so -- and the Betatron was definitely at General Steel.

DR. ZIEMER: Go ahead and proceed with the other letter.

MR. RAMSPOTT: Okay. The next letter is from a claimant, and this gentleman -- he really is very ill. His name is Gillum Burgess. (Reading) Thank you for reminding me of the Board meeting in Chicago next week. I'd like to go and would if my arriving in the emergency room of Barnes Jewish Hospital in St. Louis nearly unconscious at -- October the 11th,

which led to a total 21 days in a medical facility in metropolitan St. Louis. I'm very fortunate to be able to e-mail you this message as things started bad on the 20th of October, was taken by ambulance in a coma to St. Anthony's Center in Alton where I believe my life was saved.

The purpose in writing this letter to all of you is to hopefully ask that the letter would be read and given to the Board if you can make copies for all to ask that a determination be made before I die, and others die.

During the years that I worked at Commonwealth Plant of General Steel Castings, now GSI, I believed there was no real danger as the corporation and leaders took every precaution known at that time. When renal cancer -- or, I'm sorry -- when renal cancer, renal cell carcinoma, RCC, was found in my left kidney and all successfully removed in 1994 and later non-Hodgkin's lymphoma was found during surgery in my left eye, I never considered that the old Betatron and other non-destructive testing tools that I managed -- he was the manager of the Betatron -- were the cause.

Of course we knew nothing of skyshine activation in the '50s and '60s. Some had made investigations, but those were not well-known. Now I know much has been done by others at this time.

Talked to my mother, who had recovered from female cancer, about the kind of cancers I was diagnosed with and she knew of no other person in her or Dad's family who had ever had those types of cancer, renal cell carcinoma or non-Hodgkin's lymphoma. She believed Dad's liver cancer was either caused by the medicine to cure a serious lung disease, tuberculosis, or from beer-drinking -- not excessively, but with many meals over a long period of time. There was no biopsy done at the time on Dad, but again, the emphasis is on no RCC or lymphoma in my family before me.

The Manhattan Project, which I believe was the forerunner of the Atomic Energy Commission, did much work in the St. Louis area by contract and subcontract in plants owned by St. Louis companies, some done out of state in Missouri and Illinois like Dow Chemical, the Granite City Plant of GSI. We made X-rays of castings

used on Polaris-type submarines, including the 12 I believe missile tubes, cast armor for World War II and the Korean Conflict; uranium from Mallinckrodt Chemical Company's plant in Weldon Spring, Missouri; railroad castings like the motor trucks at each end of a subway car in New York. Using cobalt-60, GSI had a complete family of non-destructive testing from Betatrons, dye penetrant, all used daily except for the 250 KVP X-ray machine. We followed the Atomic Energy Commission requirements for all employees because one seniority list a person might be in the chemical testing area one week and assigned to the Betatron the next week. I taught the course we wrote on radiation physics, which emphasized the calculation of how many feet must be between the source and the operator to be safe. Time was a consideration.

The Polaris submarine, when armed with I believe 30 missiles, is a complete weapons system. Can you imagine any nation on earth attacking us in any way with submarines fully armed and a capable -- or capability of navigating under the polar ice cap. One of the

early submarines, the *Thresher*, went down at sea. A major investigation determined the *Thresher* began -- or when the *Thresher* went down, that began one of the most intense inspection systems ever devised. I thought I'd never forget the full name of the program. Now again my reason for communication in writing, please make your decision before others die, and myself. Respectfully submitted, Gillum E. Burgess.

DR. ZIEMER: Okay. Thank you very much, John.

MR. RAMSPOTT: Now if I can do my comments personally, and I'll keep them brief because this is simply a follow-up on some of the other issues.

First off, I really wanted to thank Robert Stephan and Senator Obama for coming to the meeting today. I think it definitely showed the claimants that people are interested in helping them. The Board's always here. Now we see some different people coming -- really quite miraculous, to be honest with you.

And then we wanted to -- I really wanted to thank the people -- I've had a few people walk up and say you really gave some good

information last night and I personally wanted to thank you for that 'cause I think it's a whole new outlook to this site and maybe some others. You know, and I'd like to see accelerators being looked at, you know, at Iowa or the Cyclotron and starting to do a quite a bit of reading on that and I see a lot of new data coming out, so maybe we helped open that book up a little bit.

Now we really came here and I -- today thrilled me to watch these other NIOSH-recommended SECs and how they were being handled and how they're being looked at. It's a whole different book of how to do business, it looks like to me, and I was really, really impressed by it. You know, there were some things came up that I saw that would apply to General Steel Industries. You take Building 55, you know, and I kept my mouth shut 'cause I was ready to jump in there, too, 'cause it's like the Betatron. It was secured and nobody else was ever allowed in there, except for the electrician, the plumber, the railroad guy, the chain guy, the crane men, inspectors, they had lunch brought in time to time. Yeah, it was secure. It had a ten-foot

wall but everybody could come in there if they had to, if they had business in there. That sound like -- that's what happened at that plant, too.

And I was also going to say that -- oh, gosh, please give these guys an out-- give them an outreach meeting. Let them tell their story. Get their -- you know, the facts out. I saw what happened at GSI. That outreach meeting's gold -- golden opportunity for everybody. Everybody learned from ours, so...

And I guess the bottom line was we're hoping NIOSH will give us that directed SEC, or that suggested recommended SEC and then you'll approve it 'cause there is a lack of data. When we started looking into this, we were -- and our relationship with NIOSH is really very good 'cause they promised to give us everything they had. We'll give you all the information. Time we started, you know what the information was was all the stuff we got off the Internet. There wasn't any information so we worked as a pretty good team now putting together all the information. And in that particular case of General Steel, there was 13 years worth of

uranium going over there and 20-some-odd years with a Betatron, so there's a lot of radiation that nobody knew about, never been discussed before. So you know, the equal treatment that someone else just mentioned on the phone, I thought that was very interesting 'cause we did -- we were at the meeting for the Iowa radiographers, you know, and so we clearly know, like there was a time frame when there was no radiological material, but you guys took into consideration the flash X-ray, which was a six-million volt accelerator. I think it was made by Allis Chalmers.

So I appreciate your time, look forward to working with you. We've got documents that we're going to share with everyone. And again, I just appreciate the consideration 'cause you guys didn't listen to these people, they don't have a chance.

Thank you.

DR. ZIEMER: Okay. Thank you, John.

Then we'll hear from Dr. McKeel -- Dan, are you still here? Yes.

(Pause)

DR. MCKEEL: Well, anyway, good evening to the

Board. I -- this -- tonight I really want to talk about the Battelle task order 16 contract, and also reinforce what John just said about why we believe -- very briefly but sort of in summary fashion -- why we merit an 83.14 SEC for General Steel Industries.

On the web -- on the OCAS web site, and I quote, is this. (Reading) On October the 12th, 2005 NIOSH awarded a one-year task order contract to Battelle. Under this contract Battelle will assist NIOSH in the dose reconstruction program by, one, evaluating and analyzing radiological data and conditions at each of the 256 work sites listed in the contract; two, developing Technical Basis Documents exposure models for the work sites where adequate radiological and work site information exists; and three, completing the dose reconstructions for claims from the work sites where a Technical Basis Document has been developed. Through their evaluation and analysis Battelle will also assist NIOSH in identifying work sites where there is insufficient information on radiological and work site condition -- end of quote.

SINW, our group, first requested to deal directly with Battelle since GSI and Dow Madison site were included as task order 16 work sites. OCAS denied us permission and has actually refused since then to provide the name of the Battelle project leader even today. Finally, after requesting, we were given Dave Allen's undated, two-page progress report on the Battelle contract. This document contained no site-specific data on the two Illinois sites. It did list 37 priority sites, one of which was Dow Madison. How this designation was derived or what it meant were not stated. OCAS informed us that no Battelle site-specific data was available for either Dow or GSI, but confirmed that zero dose reconstructions had been done on these same two Illinois sites. A TBD that covered GSI was said to be in preparation, but we have not yet seen it. Many contract milestones were acknowledged as being missed, and progress as made on far less than half the stated goals of the contract. Nor has Dave Allen's progress report yet been posted on the OCAS web site along with the other Battelle TO 16 documents.

SINW questions whether the two-page brief and undated report we were given is actually the full report provided to NIOSH. None of the subdocuments mentioned in Mr. Allen's report as being ready by November have been provided to us, specifically TBD 6000 and TBD 6001, Battelle TIB 5000 or the financial statements, to be more specific.

We then -- then learned that NIOSH had granted Battelle a no-cost seven-month extension to task order 16 to run through May 31st, 2007. A three-page document supporting this has been posted on the OCAS web site. Why, we ask, was such remarkable under-performance on a federal contract rewarded with a seven-month extension? The initial one-year contract period for TO 16 was exceeded without adequate justification, and we wonder why.

Next, and last, I want to briefly review for you, in summary, of a lot of information we presented, why we think GSI should get an immediate SEC 83.14 for the following reasons. NIOSH acknowledges it has no dosimetry data of any kind.

NIOSH acknowledges there is no comparable site

to GSI.
NIOSH acknowledges that TIB-004 on uranium metal is not adequate for dose reconstruction for the reasons that John Ramspott just outlined. There are multiple other sources than uranium metal.
NIOSH acknowledges two 25-MeV Betatron magnetic conduction particle accelerator X-ray sources were used to X-ray Mallinckrodt uranium ingots from 1952 to 1966. The Ramspotts and SINW have provided NIOSH, through OCAS, with voluminous GSI site documentation indicating why and how GSI workers were harmed. There was no effective radiation safety program and workers were badly misled about risk. The documentation we've provided includes a 400-page workbook on GSI; a detailed 13-page CATI transcript; video footage and court reporter-generated transcripts and PowerPoints presented at worker meetings; plus four peer-reviewed scientific articles and a book chapter on Betatron activation and a NIOSH grant application all from Professor Vincent Kutemperer which he submitted in 1976. The grant was to study how the activation products

might harm the workforce who handled Betatron-activated industrial materials, and Dr. Kutemperer was one of the first people -- or Mr. Kutemperer at that time -- was one of the first people to ever point out the -- the human health dangers of industrial X-ray with this type of device.

And finally, Battelle has performed no GSI dose reconstructions in 14 months, as outlined in the previous section.

The criteria for a Section 83.14 SEC have been amply fulfilled at GSI. NIOSH claims it can reconstruct the uranium-associated doses. Yet it is obvious that ORAU or Battelle have not and cannot do so, and NIOSH has provided us no evidence that it can do so. I outlined yesterday that we've only had four dose reconstructions out of the hundreds of claims submitted to General Steel, and we now believe that those four dose reconstructions were not really for GSI people.

NIOSH appears to be unwilling to add the radiation doses incurred by activation radiation from the castings and add those to additional doses from the other GSI radiation

source terms that include two cobalt-60 gamma sources and a radium-192 gamma source and a 250 KVP portable X-ray device.

NIOSH has failed to meet the timeliness or the dose reconstruction accuracy test for an SEC, and the workers have been harmed.

We therefore urge NIOSH to admit the obvious and proceed to immediately recommend GSI for a SEC 83-14-derived class that includes the residual uranium contamination period from 1966 through 1994 when DOE performed a cleanup of the residual uranium dust in the old Betatron buildings. The workers at GSI who are sick and dying deserve no less.

And after the Board meeting, if I may, we will submit further detailed documentation why we believe this post-uranium work periods at both Dow and GSI should be covered under SECs.

And again I thank the Board for hearing -- hearing us and giving us a forum to speak about this. Thank you.

DR. ZIEMER: Thank you very much, Dr. McKeel. Now we -- we'll also hear from Louise McKeel. Louise?

MS. MCKEEL: A lot of people know that I'm Mrs.

Dr. McKeel, but I'm also Louise McKeel and I guess I'm just going to read the comment and give it to you so that it stays as clear as possible.

As a taxpayer and a interested citizen, my comment reflects a broad concern that costs of prolonged dose reconstruction, combined with other procedural delays and administrative costs, could nearly match or conceivably surpass the initial claimants' aggregate appeal for compensation.

So then -- we're addressing Dr. Ziemer and other Board members, but particularly Dr. Ziemer because I believe I had a request and you responded a little bit to me that it wouldn't be too difficult, and so I want to be sure to have your attention on this.

Well, I'll say again, I'm Louise McKeel of St. Louis, Missouri. I represent Village Image News, which is an environmental news agency -- an independent news organization, also. In August 2005 and again in June 2006 I addressed the Board in two letters that asked for overall cost figures for EEOICPA. The verbal response was, one, the information was in the public

domain and straightforward to obtain; and two, Stu Hinnefeld from NIOSH would help the Board to gather the program cost information for me. Dr. Lewis Wade was going to find my original letter and provide a copy to Dr. Ziemer and the Board. So far no cost information has ever materialized.

In the meantime, the testimony from the fourth and fifth rounds of the Hostettler House Judiciary Subcommittee have emerged. It has now become clear -- to Dan and me, at least, and others, I think -- that members of the administration, including OMB, the Department of Labor, are actively attempting to reduce benefits paid under the SECs and to other EEOICPA claimants, even though Shelby Hallmark denied this in his December 5th testimony on a downloaded webcast that we received.

Mr. Hallmark apparently fears that the -- a flood of SEC awards will need to be considered in numbers that could possibly swamp the budget process, now estimated to run as high as $7 billion. My questions to the Board tonight are the following: A, will you please provide me with the total costs to date for all components

of EEOICPA from 2000 to the present, including the Board, NIOSH, SC&A audit activities, ORAU, Battelle, DOE and -- and Department of Labor; B, I'm relying on NIOSH and Department of Labor data and the unpublished probable SEC-eligible site list from the ORAU $55 million contract and the $1.5 million Battelle task order 16 contracts, will the Board please project for me the aggregate cost of all awarded and prob-- probable SEC claims and non-SEC claims that will potentially be compensated in the future; and C, if A and B are not possible, will the Board request through Congress that the Government Accountability Office immediately undertake a study to obtain and disseminate these cost figures to the public.

As a citizen and a taxpayer, I remain both surprised and alarmed to keep watching the initial visible intent of Congress to compensate certain harmed nuclear workers who vigorously and ingenuously thwarted by multiple agencies of our United States government, including presumably the Office of the President. One could make an extensive taxonomy of the ways that have been developed

to delay and deny worker claims. Meanwhile, workers are dying. Many have already died while waiting for payments of their claims. My husband Dan and numerous others have demonstrated to me the tedious and time-consuming SEC petition process that routinely results in more and more wasted time and money on every side.

I sincerely hope my third request to the Board for some comprehensive EEOICPA cost figures will not be ignored. If the costs are completely unknown and inestimable, I honestly expect a reply stating that condition, simply because I'm a taxpayer and an increasingly-interested citizen.

I wrote that before I got here, and I had a thought after I got here that I just add on. As an added comment I want to point to the rich irony that emerged this morning during the Board's discussion about four Board members' problems with income tax withholding, particularly related to the State of Georgia. Visually, the scene practically mirrored the same kinds of frustration and indignation that I am used to videotaping when nuclear workers

testify. To hear Robert Presley say -- to con- - to hear Robert Presley conclude, in self-righteous anger, there's something wrong, helps me to illustrate the way I feel about the entire accounting process into which I am inquiring through -- through NIOSH.

The suggested remedy for the Board involves the responsible agencies contacting every member of the Board to guide each through the time and energy-consuming bureaucratic tracks that appear similar, but presumably less cumbersome, than the so-called tracks that NIOSH and others are currently developing for the nuclear workers they are supposed to be serving. A lot of time could be saved by plainly recognizing that the federal government and industry and other agencies, such as the Atomic Energy Commission, did not do an adequate job of monitoring workers at numerous sites in the past. And all workers who worked in unmonitored, or merely partially monitored, environments need to be compensated on good faith, much the same way Mr. Presley will probably have his tax debts adjusted. But as a significant monument to the future, such a --

such a payoff action must lead to comprehensive steps and tracks that are vigorously developed and rapidly implemented to inform not only workers and their families, but the population at large, of the consequences and dangers of managing and experimenting with a wide range of nuclear materials, whether for industrial, educational or governmental uses. Thank you.

DR. ZIEMER: Okay. Thank you, Louise. Please let me ask you a couple of questions. Number one, we -- we had provided to us today the -- that part of the cost of the program which is the biggest part and that is the payments to claimants. You're aware of that information.

MS. MCKEEL: Yes, and I could add -- and I should add, that was after I wrote the last part of that. And I was gratified.

DR. ZIEMER: Okay.

MS. MCKEEL: To me, that was the kind of information --

DR. ZIEMER: Yeah, and -- and you --

MS. MCKEEL: -- and some of that's been available.

DR. ZIEMER: Right, and that includes both the Labor part and the -- and the NIOSH part, both

parts of the EEOICPA program, in terms of claimant compensation and -- so -- so that's -- that was the first --

MS. MCKEEL: (Unintelligible) --

DR. ZIEMER: -- I wanted to make sure --

MS. MCKEEL: -- parts of it. It's -- it's still parts of it.

DR. ZIEMER: Now if -- if you're asking what the --

MS. MCKEEL: Basically (unintelligible) --

DR. ZIEMER: -- projection is, I hope you don't ask the Board to project that. I don't think we have a way of projecting that. Maybe -- maybe Labor or NIOSH knows what the pool is out there, or one might be able to look at what's happened and -- and sort of plot that. But in any event, that piece of the information I assume you now have available. That is what --

MS. MCKEEL: True. I must say that I haven't processed it as much as I want to now that --

DR. ZIEMER: Okay, but --

MS. MCKEEL: -- it's been (unintelligible) --

DR. ZIEMER: -- the figures are there. I think the complete figures were provided to us today on the compensation --

MS. MCKEEL: Yes.

DR. ZIEMER: -- that has been given to claimants. Now the other parts of the things you were asking were the costs of, for example, this Board, and our -- I think those are numbers that are -- have been made public in this forum in -- in the last few meetings and perhaps you didn't get them, but Lew can tell you what our budget is to operate this committee, and also the -- the budget for our contractor has been made public within the last few meetings. So those two pieces of information we can give you, if not like this within the day -- I know what those are --

MS. MCKEEL: And then if we could get (unintelligible) --

DR. ZIEMER: -- and I don't think I can commit to giving anything for Labor. I'm not sure NIOSH can commit Labor to providing numbers, but that's public information. I think you'd have to go after that with the Labor people. NIOSH budget is a public thing now. I don't know how hard it is to get that, but those --

MS. MCKEEL: Well, I've been hearing some -- and of course I tape every little word --

DR. ZIEMER: Right.
MS. MCKEEL: -- but I don't always hear kind of the bottom line. I hear rates and things --
DR. ZIEMER: But what I'm telling you is that I think the numbers are there. I -- I want to make sure that you can get the information you need. We are certainly not trying to keep it from you and I think -- but I don't know how readily it -- I don't have -- I don't know what ORAU's budget is. I mean I've -- I've seen some numbers, and again, it's public information. Battelle contract is public information. So I think those numbers are there and --
MS. MCKEEL: I guess I --
DR. ZIEMER: -- and perhaps --
MS. MCKEEL: -- I had hoped --
DR. ZIEMER: -- perhaps off-line --
MS. MCKEEL: -- (unintelligible) assembling --
DR. ZIEMER: -- we can guide you to the right resources, but at least for the NIOSH and OCAS part of this, and certainly the Board stuff -- I mean our -- our budget is -- is well-known. And I -- I might tell you that -- I said to some of the Board members after our meeting

earlier today where we expressed -- expressed our frustrations, now we know what the claimants feel like when they're dealing with the federal government. This is (unintelligible) --

MS. MCKEEL: I felt this was a plus. I really felt on Mr. Presley's side for a while there, you know. It's a -- it's a problem. But maybe you can understand that little bit how people in need and who are sick must feel when they're not getting what they need.

DR. ZIEMER: Understood. Okay.

MS. MCKEEL: But I think the exercise -- let me just conclude my little thought -- was as we pull those total numbers together, the exercise was a way for us all really to figure out what the proportions are here.

DR. ZIEMER: Right, and I think you -- you may or may not be surprised, but I -- I know that sometimes there's a perception that the costs of administering this program are as great or greater than the costs of compensation, and they are nowhere close to that. The compensation is -- that has already been paid dwarfs anything that it has taken to administer

this program. But nonetheless, the figures are -- you know, are out there and let's -- we'll try to make sure that you get them. But I -- I don't think that --

MS. MCKEEL: I'll leave it with you there. There was things about --

DR. ZIEMER: I'm reluctant to commit the Board to spending time to do that as a Board task when -- when the information is there. I mean I -- I sort of feel like, in a sense, maybe it's your responsibility to track it down 'cause it's there. But let us try to help you get it.

MS. MCKEEL: I'm going to say that in running my family, which I'm always interested in the finances of the family --

DR. ZIEMER: Yeah.

MS. MCKEEL: -- I think the heads of the family, both parents or in older children, need to know how much everything costs.

DR. ZIEMER: Yeah. Yeah. Thank you. Robert Stephan from Senator Obama's office -- is Robert still with us?

DR. WADE: He's coming.

DR. ZIEMER: Would you like to read an

additional statement or have some additional comments, we'd be pleased to hear from you.

MR. STEPHAN: You guys have been here a long time. Do I need to read it, or can I just submit it?

DR. ZIEMER: You can submit it, that's fine.

MR. STEPHAN: This is a written statement from Congressman Costello, who could not be here today. He asked Senator Obama to submit this, but while the reporters were chasing me around the back of the hotel, it got dropped in a puddle, so I've been letting it dry out --

DR. ZIEMER: The dog ate the point, right.

MR. STEPHAN: -- so who do I give it to? Again, just for the record --

DR. ZIEMER: Give it to Lew.

MR. STEPHAN: -- the-- these are comments from Congressman Costello about Dow Chemical and General Steel Industries, which are both in his district. Okay? Thank you.

DR. ZIEMER: Okay. So we can enter those into the record and make copies available to the Board, as well.

DR. WADE: Right. I think we -- maybe we'll start the day tomorrow reading it into the

record.

DR. ZIEMER: Yeah.

DR. WADE: I think we'll read it into the record, but we'll do it in the morning.

MR. STEPHAN: Okay, yeah. I mean we -- we want it in the official transcript.

DR. WADE: Right, we'll do that.

MR. STEPHAN: Okay.

DR. WADE: If you would give it to Jason, maybe --

MR. STEPHAN: Thank you.

DR. WADE: -- Jason, you could read it into the record in the morning.

MR. STEPHAN: Thank you.

DR. ZIEMER: We'll do that. Now I have gone through every name on the list that I have. Was there anyone that believes that they signed up to speak that was omitted? Okay. I called a couple of names and no one responded, but we were having trouble reading them, so please come at this time. Maybe one -- is -- one of -- one of the names is Joshua.

DR. WADE: He'll identify himself.

DR. ZIEMER: Okay. The others looked like Charles, but...

MR. POLO: I'm Joe Polo* from the GSI -- ex-GSI group and I -- there was a lot brought here, and I wanted to bring out a little bit on what was on our training and so forth, and safety education. I've been a lab technician all my life -- most -- most of my life, and so I left the petroleum chemical industry and went to work for GSI November 1969 and worked through December 1972. First few days I was put in the metallurgical lab, and then they says we got a new nuclear setup here we want you to take advantage of, which was fine -- agreeable to me. I was willing to learn.

So then they put me first into the magnetic particle testing, magnaflux, and die penetrant of the tank hulls. That's how you started out. Then transferred into the Betatron X-ray lab and send you to atomic energy specification school for two weeks per the federal AEC register, and we learned radiation safety. And one month later they send me to Kodak at Rochester, New York because they were having pro-- a backlog and the -- couldn't -- the people at the time couldn't handle the -- what they call Xomats, so they send me to Rochester

to learn -- to film processor school, film and processing and everything about it, which I did. I spent two weeks there. And then I worked as a Betatron operator and film processor and film interpreter for several -- for a few years there.

Then I took classes on the use of isotopes, namely cobalt-60 -- 80-curie, you heard -- and we had a -- occasionally we leased a 100-curie. And then also 150-curie radium-152 and we X-rayed with the isotopes. 80-curie was used for X-ray for base of nuclear channel heads, pipes, flanges, seam generator components, rapid transit underframes and the Trident submarine. And like I said, majorly on the nuclear channel heads. Okay. And we -- with the Betatron we majorly X-rayed castings, tank hulls, steam-generating plants, Trident submarine parts, components and pipes and flanges and radium ingots and billets. Then of course the (unintelligible) axle housing like my colleague, George Luber, explained to you, and railroad cars and undercarriages. And the Betatron was, like he explained, 25 million energy volts, one of the bigger babies at that

time.
And in late 1969 we were using 80-curie cobalt-60 and the pill, which is the source, became hung up in the shooting position and did not retract into the pig* or container. And we walked out into the shooting room and noticed the big Victoreen survey meter pegged* and we returned to the operation room -- you know, the room we cranked the source in and out from. It was on a long cable. And we tried to calibrate and reset the Victoreen survey meter. However, to this day, I don't think -- there was also -- already radiation coming into the operation room once we opened the door, so I don't think we had a good reading on it. After cranking it in -- in and out a few times, the pill finally released and went back into the big container. I reported the incident and went to the dispensary. They send me home to our local hospital, and fortunately our local hospital was a advantage. We had some young doctors and well-- with a lot of experience and highly intelligent. It was -- yes, I was sent to the family doctors, who took blood tests and they says we don't know a whole lot about this.

They called St. Louis, they called Chicago, North Shore, and so they gave me some antibiotics and send me home. The next day I went to work, the management put me into film interpretation, you know, film reading until the field badge reports came back. Approximately nine years later I came down with lymphoma type cancer of the pancreas and liver, and I took chemotherapy, what they call chop*, for -- oh, eight times, six months, two and a half, three hours at a time at Siteman* Cancer Center, Washington University, Barnes Hospital and -- and I also cropped up with skin -- what they called pre-cancer. Nobody knew a whole lot about -- there weren't too many dermatologists up on that stuff, either, so at the present time I get treated at John Cochran PA. They've got some good ones because they are treating people that are coming back from Iraq and it's also in St. Louis. I sub-- I recently submitted all the paper forms and doctors' reports and -- in -- with Department of Labor in Paducah and NIOSH in Cincinnati. I had a telephone interview and after -- and any other government office that would request it.

We can -- it's available. Now we are waiting. General Steel Industries, although we had film badges, dosimeters and Victoreen survey meters, Geiger counters, we did not receive any reports on anything that transpired, to the best of my knowledge. And I think that was where the big failure was. So the other colleagues of mine informed you of the other important things that was needed, and this is more or less on our training and so forth. So I thank you.

DR. ZIEMER: Thank you very much. And then the other gentlemen, also from I believe the same facility.

MR. IVORY: Good evening. I came here today -- John asked me to come today --

DR. ZIEMER: Give us your name, please --

MR. IVORY: Samuel Ivory.

DR. ZIEMER: Samuel, uh-huh.

MR. IVORY: John asked me to come today and speak in behalf of the people outside of Betatron, and I'd like to say everything that they said about Betatron was true. And working at General Steel, I was a chainer. Every casting that they handled, we handled 'cause we had to take it in and out. And that went on

from year after year. We had castings sometimes stayed in -- in the plant over a year till they finished them, and we handled those plants -- those castings.

Also, in 10 building in the machine shop where they machined these materi-- these castings, they cut off the -- they cut off the steel and it went back to -- to the foundry. And what I'm saying here, everyone basically was exposed to some of this material. If you were the chainer, chipper, grinder, laborer, whatever your capacity was, you was compo-- you was exposed to this material. And just saying that if you wasn't in Betatron, you wasn't exposed -- when it came out of Betatron, it wasn't clean. Where did it go? And being the chainer, we had to lay down on it, crawl up on it to hook it up. And when you got -- took your clothes home to wash them and you look in the washing machine, it was dirty, filthy. Did you expose your family to it?

No one ever told us that it was dangerous. No one ever told us anything. And I come here today pleading with you to find out what the problem was. You know, why would you, in this

modern day, put workers at risk and wouldn't tell them?

And I'd like to thank the panel today for letting me have this opportunity. Thank you.

DR. ZIEMER: Thank you very much. That completes our list. Are there any others that didn't get an opportunity to sign up that wish to speak?

(No responses)

If not, I thank all of you for joining us tonight and for your remarks, which we are pleased to have in the record and in many cases will be able to follow up on. You're all welcome to be with us tomorrow. The Board will resume its regular deliberations at 8:30 tomorrow morning, and we're recessed until then.

(Whereupon, the meeting concluded at 9:11 p.m.)

CERTIFICATE OF COURT REPORTER

STATE OF GEORGIA

COUNTY OF FULTON

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of Dec. 12, 2006; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 18th day of February, 2007.

_____

STEVEN RAY GREEN, CCR

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