UNITED STATES DEPARTMENT OF LABOR

+ + + + +

ADVISORY BOARD ON TOXIC SUBSTANCES
AND WORKER HEALTH

+ + + + +

SUBCOMMITTEE ON THE SITE EXPOSURE
MATRICES (AREA #1)

+ + + + +

MEETING

+ + + + +

TUESDAY,
MARCH 21, 2017

+ + + + +

The Subcommittee met telephonically at 1:00 p.m. Eastern Time, Laura S. Welch, Chair, presiding.

MEMBERS

SCIENTIFIC COMMUNITY:

JOHN M. DEMENT

MEDICAL COMMUNITY:

LAURA S. WELCH, Chair
STEVEN MARKOWITZ

CLAIMANT COMMUNITY:

DURONDA M. POPE
OTHER ADVISORY BOARD MEMBERS PRESENT:

FAYE VLIEGER

DESIGNATED FEDERAL OFFICIAL:

CARRIE RHOADS

A G E N D A

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

1:03 p.m.

MS. RHOADS: Hello, everybody. My name is Carrie Rhoads and I'd like to welcome you to today's teleconference meeting of the Department of Labor's Advisory Board on Toxic Substances and Worker Health, the Subcommittee on the Site Exposure Matrices, or SEM.

I'm the Board's Designated Federal Officer, or DFO, for today's meeting. We do appreciate the work of the Board Members in preparing for this meeting. I'll introduce the Board Members and take a quick roll call. Dr. Laura Welch is the Chair of this group.

CHAIR WELCH: And I'm here.

MS. RHOADS: Great. And the Members are: Dr. John Dement --

MEMBER DEMENT: I'm here.

MS. RHOADS: -- Mr. Garry Whitley, who is not able to attend today's call, Mr. Kirk Domina, who will be calling in a little

later, Mr. Mark Griffon, who will also be calling in, Ms. Duronda Pope --

MEMBER POPE: I'm here.

MS. RHOADS: -- and Dr. Steven Markowitz.

MEMBER MARKOWITZ: Yes, I'm here.

MS. RHOADS: And Dr. Markowitz is also the Chair of the Board. On the line as well is Ms. Faye Vlieger, who is also a member of the Board. We're --

MEMBER VLIEGER: I'm here.

MS. RHOADS: Great. We're scheduled to meet from 1:00 to 3:00 p.m. Eastern Time today. In the room with me is Melissa Schroeder from SIDEM, our contractor. As far as timing goes, I don't know if we'll need to take a break today, that can be up to Dr. Welch, depending on how the discussion is going.

Copies of all the meeting materials and any written public comments are or will be

available on the Board's website, under the heading meetings, and the listing there for this Subcommittee meeting. The documents will also be up on the WebEx screen so everyone can follow along with the discussion.

The Board's website can be found at dol.gov/owcp/energy/regs/compliance/advisoryboard.htm. If you haven't already visited the Board's website, I encourage you to do so. If you click on today's meeting date, you'll see a page dedicated entirely to today's meeting.

The webpage contains publicly available materials submitted to us in advance and we'll publish any materials that are provided to the Subcommittee. There, you can also find today's agenda, as well as instructions for participating remotely.

If you are participating remotely and you're having a problem, please email us at energyadvisoryboard@dol.gov. If you're joining by WebEx, please note that this session is for

viewing only will not be interactive. The phones will also be muted for non-Advisory Board Members.

Please note that we do not have a scheduled public comment session today. The call-in information has been posted on the Advisory Board's website so the public may listen in, but not participate in the Subcommittee's discussion.

The Advisory Board voted at its April 2016 meeting that Subcommittee meetings should be open to the public, so we'll prepare transcripts and minutes from today's meeting. During the Board's discussions today, as we are on a teleconference line, please speak clearly enough for the transcriber to understand.

When you begin speaking, especially at the start of the meeting, please state your name so we can get an accurate record of the discussion. Also, I'd like to ask our transcriber to please let us know if you're

having an issue with hearing anyone or with the recording.

As DFO, I see that the minutes are prepared and ensure they're certified by the Chair. The minutes of today's meeting will be available on the Board's website no later than 90 calendar days from today, but if they're available sooner, they'll be public before the 90th day. Also, although formal minutes will be prepared, we'll also be publishing verbatim transcripts. Those transcripts should be available on the Board's website within 30 days.

I'd like to remind the Advisory Board Members that there are some materials that have been provided to you in your capacity as Special Government Employees and Members of the Board which are not for public disclosure and cannot be shared or discussed publicly, including in this meeting. Please be aware of this as we continue with the meeting today.

These materials can be discussed in a general way, which does not include using any personally identifiable information, such as names, addresses, specific facilities if a case is being discussed, or doctors' names.

And with that, I convene this meeting of the Advisory Board on Toxic Substances and Worker Health, the SEM Subcommittee, and I'm turning it over to Dr. Welch, who is the Chair.

CHAIR WELCH: Thank you, Carrie. I am talking on my phone on speaker. I just wanted to ask the transcriber if he or she can hear me.

COURT REPORTER: I can hear you.

CHAIR WELCH: Great, because a couple of times, we've had some trouble with that. Well, hello, everybody. Thanks for being on the call. I had suggested four items for our agenda today, which is continuing our work on the Occupational Health Questionnaire and also

on a presumption for COPD. And I think we'll probably spend most of our time on those.

But there's one more, we have talked in the past about an approach to exposure assessment at sites where there is not a SEM and I wanted to be sure that we have addressed that as best we can with our previous recommendations regarding exposure assessment and the new recommendations for the OHQ.

And then, the fourth item is, Dr. Markowitz had asked me and our Committee to circle back and see if there were additional recommendations in the Institute of Medicine report that we should put forward again to the Department of Labor.

We had focused initially on the addition of other sources for causation information beyond Haz-Map. And I did prepare a summary of some of the other recommendations, which I did not send to you, but I thought we would have a general discussion of that.

I sent out a document for you all to review and that we'll go over now, so if for any reason anybody doesn't have the draft OHQ recommendations or the COPD, let me know and I can forward it again. But it looks like everyone who is on the call was on the email. Any questions about the agenda before we move on to the number one? Okay.

So, improving the OHQ. We had talked at our last conference call and came to the consensus that the revision, the draft revision we have seen from Paragon, which is the contractor for DOL, didn't seem to be an improvement and we liked many of the things that were -- many of the items that had been on the previous questionnaire.

We identified that one of the problems was that the building sites questionnaire does have information about tasks, which is very helpful in assessing exposures, but that the -- it's been very hard

to develop a list of tasks for production workers.

So, one of the action items was, I was going to talk to Mark Griffon to see if he had any ideas about developing a list of tasks. And then, I developed this draft that we have to look at and I discussed it via email with John Dement, to basically make sure we were covering the parts of the OHQ that we had talked about before.

And he gave me a preliminary okay with the recommendations I've included here. So, I thought we would just walk through them. And then, if we agree on these, there are four recommendations and I put in a rationale for each one with the idea that this document could then go to the whole Board for discussion and approval.

So, the first one is the, as I just mentioned, the current version of the OHQ has a list of hazards, exposures, and materials. So,

we're recommending that that list be maintained on a future version of the OHQ and that it be expanded by adding the list of hazards and materials from BTMed.

The idea for that is that the more information there is on specific hazards and materials for the claims examiner, the IH, and the medical consultant, the more they'll be able to assess an individual's exposure, which is clearly important for making a determination about whether the disease was caused by those exposures.

Anybody have any thoughts or additions on this expansion of the current OHQ by adding the BTMed hazards, exposures, and materials? Okay. You're all so quiet, but that's good. I mean, we'll be moving quickly.

Then, the next one is adding the list of tasks. So, we're recommending adding the list of tasks we have in BTMed, which is clearly incomplete and really serves some of

the production workers, if they're doing similar tasks, but not all of them.

But after talking with Mark and thinking over our prior conversations, we really thought it was almost impossible to develop a list of tasks for everyone. And so, we are going to give a way for workers to describe what they did without having to have a list of tasks.

I think tasks are somewhat like job titles, there are many different ways that people describe the same bit of work, depending on who is performing it, so that we didn't really think we could come up with a list of specific tasks. And then -- oh, yes. Under the first one, the idea was that the workers would describe the tasks associated with the exposure.

So, if they mentioned they were exposed to beryllium, then they would in free text describe how they were exposed to each

material, with an emphasis on describing the tasks and that that would be a free text, but readily available to anybody who reviewed the questionnaire, as well as giving some information on frequency of the exposure, so that, rather than asking about a long list of tasks, we're hoping that we will get the task information by asking workers about their exposures that they had and then, from that, the task that entailed that exposure.

I think this is an area where you all should really think about it and see if we can think of any other way. I mean, this is coming off of talking with Mark and talking with John about what one could do as hygienist, that there may be other things that people who are more familiar with the facilities might be able to come up with another way, an additional thing we could add that might capture tasks. So, I'm definitely looking for comments on that.

MEMBER MARKOWITZ: Laura, this is Steven. So, the -- I see on the BTMed questionnaire, you have the tasks and you ask for each one the frequency. So, would the idea with the non-construction tasks, that when a person says, yes, I was exposed to methylene chloride, and the interviewer asks, what did you do with methylene chloride, and they write down one or more tasks, that the interviewer would also ask the frequency in the same way that you have it on the BTMed questionnaire?

CHAIR WELCH: That's a good idea. I was -- I had -- what I was thinking was they would talk about the frequency of the exposure, but I agree, it probably makes more sense to talk about the frequency of the task, because that is what we care about, is a task may have methylene chloride, it may have other solvents, and often, we're looking at the combined exposure of the solvents. I can't quite picture a flow for that, but --

MEMBER MARKOWITZ: Right.

CHAIR WELCH: -- maybe there should be a little box to the side that after you identify exposure or identify a task, we ask -- the full text goes into the task and then we ask frequency of that.

MEMBER MARKOWITZ: Right. Or the frequency could describe that exposure, so that whoever is interpreting the information would have the frequency of exposure to that particular agent, as well as have the tasks.

That might be better, because what's going to happen is the same task -- with the same task, if there are multiple exposures, the person filling out the questionnaire is going to say, see the above response to methylene chloride, or whatever, and then we won't get the frequency. But if you attach the frequency to the exposure, then it ought to simplify it.

CHAIR WELCH: Well, that -- it's easier to figure out how to do that if you're

asking about exposure and then you attach frequency for each exposure.

MEMBER MARKOWITZ: Right.

CHAIR WELCH: But if you think that's sufficient, that's clearly -- the flow would be easier.

MEMBER MARKOWITZ: Right. No, I mean, still get the task, because you want some sense of the intensity, right?

CHAIR WELCH: Right.

MEMBER MARKOWITZ: But you don't sacrifice the frequency information for that.

CHAIR WELCH: Okay.

MEMBER DEMENT: Hi, this is John. I agree with Steven's recommendation. I would be more interested in how frequently they had that exposure than trying to tag it all into each task, which I think just adds a lot more probably unnecessary time and detail that they probably won't remember anyway.

CHAIR WELCH: Okay.

MEMBER DEMENT: I think that's a simplification that's workable.

CHAIR WELCH: Okay. And one of the last recommendations is that this be tested and tested again. So, if there's some confusion in the flow of questions, we can fix that, someone can fix that.

And so, the way it's described in this document, under the first recommendation, is that the worker will be asked to describe how he or she was exposed to each material and describe the task associated with that exposure be captured within free text. The worker will be also asked to rate the frequency of exposure to each hazard. So, that, I think, is what you all are recommending. So, I think we're good.

MEMBER DEMENT: All right.

CHAIR WELCH: Okay, good. Then, number three is adding specific questions about vapors, gases, dusts, and fumes to be able to help with causation for COPD. And the study

that's been used in population-based studies is the question, it's simply, have you been exposed to vapors, gases, dusts, and fumes? And then it says, if the answer is yes, the worker is asked to describe the tasks and materials associated with exposure and add a frequency.

I guess, what we're going to do is the same thing as above, it would make sense to have them describe the materials and then the tasks and do a frequency of the materials. This is one, I think it's going to take some laying out to make it make sense, to get the flow correctly.

I guess, my thought, just thinking about it right now, would be, we could advance this recommendation as it's written and there's the next step of figuring out the question.

Do you think we need to specify under where it says, if the answer is yes, the worker is then asked to describe in detail the

tasks and materials associated with exposure, the frequency using the scale recommended? Should we say, frequency of materials or leave it as it is?

MEMBER MARKOWITZ: I'm sorry, this is Steven. What do you -- leave it as is, what is it now?

CHAIR WELCH: Well, in the -- when I put in that the worker should describe the frequency, it's not specified whether it's the frequency of the task or the frequency of the materials. Because we say, if they say yes to vapors, gases, dusts, and fumes, they should describe the tasks and materials and then the frequency.

MEMBER MARKOWITZ: So, this is Steven. So, if this question comes after the hazard-by-hazard description of tasks and frequency, then it might be unnecessary actually to ask about, to re-ask about tasks.

If you were to ask, if there's a yes

to the VGDF question and then a person is asked, okay, what were those gases or dusts, and they name the particular hazards, whoever is using the information, the IH or CE, could actually look back at the list of hazards, because that's where the tasks are already going to be, to get a sense of what was done with that material.

The other thing is, of course, is that -- it's interesting, in the literature, the VGDF literature, there wasn't a whole lot of detail, I don't think there was a whole lot of detail captured about what the nature of those vapors, gases, dusts, and fumes were, and yet, that single question was highly predictive.

So, I'm not sure we need a -- I think if we went with, what were those dusts, gases, vapors, or fumes, and what the frequency was and then get into duration, that would suffice.

CHAIR WELCH: Okay.

MEMBER DEMENT: This is John. I agree. Just a simple question in the literature, without diving into detail, is very predictive. It's been validated in population-based studies.

CHAIR WELCH: I think that one reason to get associated materials is that, then the materials can, some of those materials can be used to look into SEM.

So, if the worker's been exposed to a mixture of agents and identifies a lot of them, if the claims examiner feels they need to find, they need to validate some of these exposures, maybe even just a couple of the mixtures in the SEM, then having the materials will be helpful that way.

MEMBER DEMENT: No, I agree. I think we should ask the follow-up questions, it's just that, even on the frequency, we'd be sort of happy to ask the same as we did with the

materials and this is just a mixture, asking the frequency of the exposure to VGDF rather than looking at each component.

CHAIR WELCH: Okay.

MEMBER MARKOWITZ: This is Steven. So, I notice you want to ask about the number of years of exposure and I'm wondering whether we should also ask simply the year of first exposure. But just to -- we'll be talking, I know, about the COPD presumption in a bit, but I think that's part of the COPD presumption. And if so, then we need it here.

CHAIR WELCH: Good idea, yes. So, do you think we can ask, instead of asking about materials here, ask them the frequency of exposure? Or are we safer asking them to repeat it again? Because it's very possible that if you ask the worker what materials they worked with, they won't really have thought about a lot of materials.

MEMBER DEMENT: Yes, it would be my

assumption they would not have list a lot of -- perhaps even list everything. But I think it's okay to ask of you here. One of the things we should -- it was going to be sort of the last question in this whole series, are these vapors, gases, dusts, and fumes covered in the previous materials that you described or listed?

CHAIR WELCH: Okay.

MEMBER DEMENT: I mean, it's possible they may have already been covered, but it's possible that they weren't. And I guess I'd be interested more specifically in ones that weren't already covered.

CHAIR WELCH: Okay. So, I could edit this to say that, we could say, have you been exposed to vapors, gases, dusts, and fumes, and then, have you described all those exposures in your answers above? If not, then describe the tasks and materials that aren't already covered. Because we are asking the frequency

up above.

MEMBER DEMENT: Yes, that sounds reasonable to me.

CHAIR WELCH: Okay.

MEMBER MARKOWITZ: The -- this is Steven. I'm picturing this, anticipating what we're going to talk about maybe a little bit later with the COPD presumption, I mean, what would be nice, it would be if the claims examiner had a simple little algorithm based on this series of questions, whereby they could make a decision about COPD.

So, exposed to VGDF? Yes. How many years? Ten years, whatever the respondent says, but it's above the threshold. Frequency? At least once a week. Positive response -- began at least 15 years ago? Positive response to those four questions? Then the person gets compensated for COPD. And I'm afraid if we complicate it too much here, then we'll make the use for -- to serve a presumption to be

more challenging.

CHAIR WELCH: That's good. Yes. So, then the notes I already made were that, rather than asking about specific hazards, we ask about year of first exposure to VGDF and frequency.

And then, ask, in your answers above, have you described all the tasks and materials where you were exposed? And if not, they can expand it. But we would already have had, as the first two questions, the frequency of that umbrella exposure and the year of first exposure.

MEMBER MARKOWITZ: Right.

CHAIR WELCH: Okay. And I think you're right, these may be -- if we could build it into the computer system, it just says, yes, yes, yes, okay, accept claim, you don't have to think about it.

I don't know if we could get that, but it's possible to do that if the decision

tree is right and once the answers are put in, the decision tree makes a recommendation. More thoughts about this? I would --

MEMBER POPE: This is Duronda --

CHAIR WELCH: -- I will --

MEMBER POPE: Duronda Pope.

CHAIR WELCH: Yes?

MEMBER POPE: I'm just trying to clarify. So, if a claimant says that they've been exposed to gases, vapors, and dusts, and then -- it just seems like that's the -- you're being asked that question again, later on in the questionnaire. Is that not true?

CHAIR WELCH: Well, up above, I mean, we've got -- the way I was picturing it was they would say, you'd say, what materials did you work with in your job?

MEMBER POPE: Yes.

CHAIR WELCH: And then, for each one of those, you'd say, you'd describe a task and some information about the frequency of the

exposure. Then, they'd come down to this question, have you been exposed to vapors, gases, dusts, and fumes?

And has the worker -- it would be, it should be repeating information that the worker has already given, but it's one place where we get them to say, yes, I have been, so that's every day for all the years I've worked there. Because the claims examiner -- otherwise, we just tell the claims examiner, these particular materials represent a vapor, a gas, dust, and fumes.

MEMBER POPE: Okay. And then --

CHAIR WELCH: And then --

MEMBER POPE: And then, you're going to ask them what's the first time that they were exposed to it?

CHAIR WELCH: Yes. Because in the presumption about COPD, we're recommending that the worker should have been exposed at least 15 years prior to their claim, since it seems to

take that long.

MEMBER POPE: Okay.

CHAIR WELCH: And then -- so, you'd want to capture that there. I think it will be redundant, which is a good reason not to make it take too long.

But it does mean, if we want to go back at some point and try to do some kind of assessment of how well DOL implemented these recommendations, well, we could look at that question rather than having to look at the whole work history and figure out what should have been considered as vapors, gases, dusts, and fumes.

MEMBER VLIEGER: This is Faye. I just have a question about, the Department of Labor has been assessing the intensity of the exposure as a quantity of exposure versus duration, is this going to lay that question to rest because of the presumption by labor category or task?

CHAIR WELCH: Well, this is -- you can't really ask the worker the intensity of exposure, I don't think. I mean, DOL has made some assumptions about intensity of exposure in some of their post-95 memo and the effect of presumption, but the industrial hygienist should be able to understand intensity by looking at the tasks. If there's a case where an individual -- where knowing intensity is important, then tasks is the best information for that. Does that make sense?

MEMBER VLIEGER: Yes, it makes sense to me. I was just wondering if we were going to get away from them asking the intensity, even if it is a presumption because they are exposed by task or labor category. That was the only hurdle I saw to this type of questioning.

CHAIR WELCH: Well, so, what you do -- so, if someone stepped in with the presumption, like you could certainly have a

presumption for job titles or a labor category that wouldn't even require all the detail you're going to get on the Occupational Health Questionnaire. But it would be nice to have it for the people for whom some exposure is not presumed based on their job title.

MEMBER VLIEGER: Okay. I understand, I just -- I was just being devil's advocate there for a second.

CHAIR WELCH: Yes. Do you think that's okay? I mean --

MEMBER VLIEGER: If the presumption is that this particular task or this particular labor category has -- meets the exposure level from the studies, then, yes, I think it would fly, as long as we're clear about that, that this does not mean that they get asked about intensity of exposure.

CHAIR WELCH: Yes. So, that wouldn't necessarily be -- the reason that you'd want to ask about intensity here would be if there was

a presumption that we're relying on and we want to make sure they collect any information we would need that is invoked in the future presumptions.

I wouldn't try to put in some kind of assessment of intensity in a presumption. But there is -- the idea of intensity is built into labor category or task.

MEMBER VLIEGER: Yes. The workers don't have the information anyway, so we have to do something to get around that.

CHAIR WELCH: Right. And intensity is a little bit like pain, one person's ten is somebody else's five.

MEMBER VLIEGER: Exactly.

MEMBER MARKOWITZ: This is Steven. Are those --

CHAIR WELCH: Okay.

MEMBER MARKOWITZ: -- for the person responding, yes, I was exposed to vapors, dusts, gases, and fumes, that means that it was

enough to smell or enough to see or whatever, which implies a certain intensity.

CHAIR WELCH: Okay. So, the fourth one is that we -- pointing out that any new questionnaire has to be tested. And I would -- I don't think, at the time of our last call, I had read this new -- what's it called -- Bulletin, this Bulletin 16-03, in which they covered the direct disease link work process, which links medical conditions to specific tasks.

And the question would be, as we're developing the questionnaire that collects information, more information on materials and tasks, we would then be petitioned to support the process that they've described.

That -- 16-03 sounds great, I have no idea how they're going to implement it. Because prior to our recommending it, they actually asked about tasks, there's no information on task in the SEM or in the

Occupational Health Questionnaire.

So, just a small point. But since that Bulletin is going to be a way for a lot of people to have their claims accepted, I think it's important that we make sure over time and bring it back to the Board an assessment of how well our revised OHQ is capturing the information needed for that direct disease link process to work.

MEMBER VLIEGER: This is Faye. I don't know if any of you have tooled around the SEM site or not, but the links to -- it's hard to find labor categories, particularly under construction. You have to burrow down quite deeply now to find them.

And they're not consistent. An asbestos worker is listed a bunch of different ways and each one has different exposures once you finally get through the construction worker layer.

And so, I'm not sure how this direct

disease link work process stuff is going to work when they have so many different answers for somebody depending on how they responded to the OHQ.

CHAIR WELCH: Now, that's bad.

MEMBER VLIEGER: Yes, it is. And did I hear that we have a contractor listening in on the call today? Is that the contractor for the SEM?

MS. RHOADS: No, no, it's the contractor for the Board for logistics.

MEMBER VLIEGER: I might ask Dr. Markowitz, because the SEM is kind of the basis for all of this discussion on exposures, could we have someone at the Board meeting give us a demonstration of the SEM and what's going on with it?

MEMBER MARKOWITZ: Sure. Carrie, if you could just make a note of that? I know DOL will be there, so we can certainly do -- do you also mean, Faye, to ask for how this new

Bulletin is applied given the SEM?

MEMBER VLIEGER: Yes, because I'm having a hard time finding these direct link processes that they have listed. Until we started reconstructing the SEM a while ago, it was relatively easy by sight to find a labor category, but then they took the link disease process links out. I don't know if that was because they quit using Haz-Map or because Haz-Map was found to not be the most reliable place to have those links, I don't know.

But even on the site, it says they took these disease links out, so I don't know if they're talking in Bulletin 16-03 about the public SEM or the SEM that only the claims examiners and DOL people have access to, which we call the private SEM.

So, just, this is all kind of confusing to me when they're saying, these link processes are there, but you can't find them very easily, if at all, on the public SEM.

MEMBER MARKOWITZ: So, Faye, if you could just write out your request to make sure we get it right.

MEMBER VLIEGER: No problem.

MEMBER MARKOWITZ: Okay, thanks.

MEMBER POPE: Well, this is Duronda --

MEMBER MARKOWITZ: And --

MEMBER POPE: Go ahead.

MEMBER MARKOWITZ: No, go ahead, please.

MEMBER POPE: I think I agree with Faye in the respect that, not only asbestos workers, but RCTs, radiological technicians, radiation monitors, they were in all areas and exposed to many, many, many things, and so, to try to connect them to say that their particular task is connected to some type of disease, I would think would be very difficult, being that they were exposed to many, many different things at the sites.

MEMBER VLIEGER: I would agree. They didn't even monitor for many of the things. Even as IH and radiation techs, they didn't monitor for everything that was out there, so for them to know how to report it would be difficult.

But I think if we just say, these people are presumed to have been exposed to all of these things, then that's it. A certain amount of time, I guess, if we can find that in studies to prove the duration required. But the workers don't know how to answer those questions.

MEMBER POPE: I agree.

CHAIR WELCH: I didn't realize that the SEM had been changed in response to that new Bulletin, so it would be great to have an understanding of what they're doing with it. Okay.

Well, I need to rewrite some of the text under the VGDF, which I will distribute

around to everybody relatively soon. And then, either you can take a look and see if you think there's enough, this is enough to send to the overall Board, once I've done that. Is that okay?

MEMBER MARKOWITZ: Okay.

CHAIR WELCH: Okay. So, let's turn to the COPD. So, there already is a COPD presumption and it is -- I don't know how to describe it, but it's not up to the current evidence, let's put it that way. But I thought it might be helpful to frame this presumption as making revisions to the current presumption.

So, we are recommending or I'm recommending that a whole range of specific agents be considered presumed to cause COPD. And that's within the first paragraph, under A, Covered Exposures.

And then, number B is that the labor categories that they had listed in the attachment to the prior, to the current

presumption, that those are definitely exposed to VGDF, but it's not an inclusive, completely inclusive list.

And that, if the worker reports exposure to VGDF on their Occupational Health Questionnaire, he would be presumed to be exposed and it would also be presumed that exposure would aggregate and contribute to a cause. So, either your exposure is determined because you are in one of the labor categories or because you put the exposure on the OHQ. Any comments on those two?

MEMBER MARKOWITZ: Yes, this is Steven. So, in your presumption for COPD item A, so there the query is about specific exposures or some specific tasks, right?

And those specific items, it's envisioned that they would be asked on the OHQ. In other words, the CE can draw a response or look for the answers to whether the person had these specific exposures by going through the

OHQ and identifying them.

CHAIR WELCH: That is a very good point. We were going to have a list of materials, so we'll make sure that those are included.

MEMBER MARKOWITZ: So, just to follow that line of thinking, so there's going to be some redundancy, because this list in A is going to be covered in the OHQ in the section on hazards and associated tasks. So, it's going to require some finesse.

But it raises the question that, do we need item A? What is -- and this is a little bit of a devil's advocate question, do we need item A? Or if a person responds positive to VGDF and with all the time parameters, what's gained by also asking the CE to look at the specifics on item A?

CHAIR WELCH: Well, I would worry that a worker might know that they were exposed to welding, but they might not call that a

dust. They might not really know what vapors, gases, dusts, and fumes means and how broad it is.

MEMBER MARKOWITZ: Right.

CHAIR WELCH: That would be my concern.

MEMBER MARKOWITZ: I mean, I kind of agree with that, actually. It's a bit of a safety net, because --

CHAIR WELCH: Yes.

MEMBER MARKOWITZ: -- we don't know, in any studies of VGDF, we don't really know whether it's going to miss some people. But I thought I'd ask the question.

CHAIR WELCH: Okay. Well, I mean, I think that there's a potential downside to having a specific list in that the claims examiner may feel like, well, if they didn't answer something on that list, then they weren't really exposed. And if these agents are part of other agents that are in the OHQ

and not singled out as representing the spectrum of VGDF, I think we will avoid that to some degree.

A lot of the studies also -- we said that this question is predictive, which it is, but a lot of the studies that have looked at occupational exposures to VGDF have done it based on job title. So, they've looked at case-controlled studies with COPD and then assessing based on the worker's reports, primarily their tasks and materials, tasks and jobs.

MEMBER MARKOWITZ: Right. And -- this is Steven again. The other thing is that there may be some sceptics about the VGDF approach and, for instance, if claimants are prompted to answer yes to the VGDF question without providing any further detail, then the compensation process strikes me as a little bit vulnerable to unfriendly forces, so that having some greater evidence beyond VGDF of that

exposure listed in A would be very useful. It would give a lot more confidence.

CHAIR WELCH: Good, okay.

MEMBER DEMENT: This is John. Just a comment also on how some of these studies have been done, because I think you can go at it both ways. Lots of studies have simply asked about the general question of vapors, gases, dusts, and fumes and really haven't gone into a lot of detail, but even that question in itself has been supportive of a relationship with COPD.

Most of the studies that we've done with VGDF, we approach it from the other end. We ask specific questions about a whole list of materials and tasks and then generated our index to VGDF exposures based on those individuals summed together.

And that, in itself, is also predictive of exposure. So, I think we're good coming at it from both ends. It just, in my

view, provides greater support, as Steven has said, for what we're trying to do with COPD.

CHAIR WELCH: Good, okay. So, the next item is, it should be presumed that reported exposures to toxic substances -- and maybe it should say VGDF -- will cause or contribute to or aggravate COPD at any period of employment are contributory.

Just pointing out that there's no reason to assume that these exposures have been eliminated just because it's the year 2016. And I don't think we're going to have a problem with that.

Now, the next one is the five year requirement and the duration of employment in the covered DOE facility of at least five years with reported exposures to VGDF. I spent some time looking for exposure data that was -- looking at studies that would allow us to come up with this number, it was certainly in our study of BTMed workers.

And looking at exposures in the groups, populations that were exposed to VGDF, not necessarily asbestos or silica, there was very little information on duration of employment, but a lot of the population had more than five years of exposure to be considered exposed.

And then, if we look at specific agents, like silica or coal dust, it also supports the idea that five years' exposure is a reasonable requirement for causation and presumption. So, floor is open to comment on the five years.

MEMBER MARKOWITZ: This is Steven again. So, what I -- where I get hung up is not on causation, but on aggregation of contribution. And just thinking about contribution, most blue collar workers stay blue collar throughout their careers. So, they're quite likely to have exposures at non-DOE sites that would involve -- if they had it

at DOE, VGDF exposure, they're likely to have it outside.

And I realize either by policy or perhaps, I think it's probably a DOL policy that the claims examiner don't look, inquire about non-DOE jobs. And that, I think, probably works to the claimant's benefit much of the time.

But it's a little problematic here, because it's easy to imagine someone who was there at a DOE site for three years, more than three years, but then spent, before or after, spent 20 years exposed to VGDF and you might say, well, the DOE contribution was minor, but the standard is contribute.

So, you also have another situation where the person develops COPD and within short order, with or without DOE exposure, but within a relatively brief exposure, could easily have an exacerbation due to VGDF exposure at DOE. So, there are a -- those are a couple of

scenarios that this doesn't quite accommodate. Although I don't have any ready solutions, I thought I'd raise them.

MEMBER DEMENT: I agree with you on both accounts -- this is John -- on both accounts, Steven. I -- a lot of our construction workers are in and out of DOE sites, many of them come to DOE sites having been in construction for many years.

And it's impossible to separate off, if you're looking at the risk of COPD, it would be impossible to separate off those contributions in the studies that we've done. And all we can really say is that all of those exposures likely contributed to the risk of COPD.

But I don't know how to get around it, except to be very specific in our presumptive language that this is not one of exclusion of individuals who develop COPD or aggravated their current COPD by lesser

duration of exposure. I don't have a solution for it either, that's all I'm saying.

CHAIR WELCH: In the next paragraph, we do say, for the 15 years since first exposure, DOL should consider their earliest date of exposure, considering employment prior to work at DOE if necessary.

Can we recommend that DOL, for this particular condition, assess exposure outside of -- prior to DOE work? I mean, could we put that in here and then, see what comments we get back from the Department of Labor people?

MEMBER VLIEGER: This is Faye. On the current OHQ, they do ask about your other DOE employment. There's a section on the current OHQ for it. However, they don't do an in-depth questionnaire of exposures.

CHAIR WELCH: How about work outside of DOE, though? They don't ask about that at all, do they?

MEMBER VLIEGER: They ask about what

your employment was on the questionnaire and what those exposures were.

CHAIR WELCH: Okay.

MEMBER MARKOWITZ: Well, and we can -- this is Steven. We can ask DOL how firm their policy is about not looking at non-DOE employment. I mean, I can imagine it would be problematic and work against claimants in many instances. But what if we could float your idea, Laura, what about just applied to this condition, since this condition is different from many?

So, we can ask about that and if we get a firm answer, we can try to devise or we could either disagree and recommend otherwise or we could try to devise something that might begin to address this. For instance, lowering the five years to two years or some shorter period, which -- it depends on what kind of error you want to make, basically.

CHAIR WELCH: If we knew that 90

percent of the people who work on the DOE facilities had done similar work before or after, then you could presume if they had two years at DOE, they had five years altogether. And we don't know the answer to that. I mean -- but we don't know it for everybody else.

MEMBER MARKOWITZ: Right. Or maybe -- this is Steven. It may be just that for people with shorter exposure, they won't meet the presumption, it goes to the industrial hygienist and at that point, they could then inquire about non-DOE exposures and decide about contributions.

CHAIR WELCH: But I think we do have to be sure that the OHQ is asking that.

MEMBER POPE: So, is that -- this is Duronda. Is that -- if that claim -- if the CE looks at that claimant's form and sees that it is under the five years, does it stop there, it does not go to the IH or the CMC?

CHAIR WELCH: No, it would go on.

And I think we, somewhere in here, yes, when we go to, closer to the bottom, on the bottom of Page 2, claims examiner should not deny claims for COPD if the worker has fewer than five years of exposure or if the period of two weeks -- or until diagnosis is less than 2 years. Claims that do not meet the requirements set forth here, but do have reported exposure to VGDF should be sent for IH or CMC review.

MEMBER POPE: Okay. I didn't read that far, thank you.

CHAIR WELCH: That's all right. A lot of words on there.

MEMBER DEMENT: I think it might be helpful as we draft this language to capture some of this discussion in our recommendation for presumption. That is, a worker could have exposure prior to DOE or after DOE, that we wouldn't preclude that the DOE exposure in and of itself would not contribute to, aggravate exposure -- COPD just in and of itself.

I mean, what I'm saying is, just try to capture some of this discussion so that we're clear that it should be okay to consider other exposures outside of DOE in the full, final decision.

CHAIR WELCH: Okay.

MEMBER DEMENT: I don't know exactly how to capture that more clearly.

MEMBER VLIEGER: This is Faye. Part of the problem when we refer it out to a CMC, when DOL refers it out to a CMC, they lump the cause, contribute, and aggravate into one part of the -- and they don't say, please opine independently on contributory, aggravating, or causation.

So, the CMC just parrots back that statement and never talks about contributing or aggravating. And so, many times when they should have done that, we get a no answer from the CMC, because they really are only look at, did it cause?

So, I think, and if we're going to look at other work outside DOE and considering the DOE exposure to be aggravating or contributory, then we need to ensure that that's how the question is asked of the CMC and not just give them the clause that -- even though they're answering it, they're not really answering it.

CHAIR WELCH: Yes, I agree with you on that. I would expand it a little bit in that, I think that the CMCs don't understand the framework of the compensation program, that in the rest of their life it's unlikely they've been presented with a compensation program that would accept a claim that it was aggravated by or contributed to, a worker who's had 20 years of exposure, of which one year is at DOE, the CMCs are probably used to saying that that wasn't contributory.

MEMBER VLIEGER: I would say that they're also not, the CEs are not required to

provide that education in their referrals, because it is presumed that the CMCs have read the documents in the program, which it's a lot to expect. And this is demonstrated many times when they're asked about beryllium disease according to this program.

So, it's not just one incident or one disease where this is happening, but it is that the CMCs aren't given that little primer in their referral that says, by the way, this is what the program standard is. And so, unless we're going to fix that, I don't know how we can add the contributory and aggravated part.

CHAIR WELCH: Actually, that's a really good idea for the Committee that's looking at the CMCs, is that there could be a primer, there could be a eight page brochure, nicely done, that goes with each claim that says -- and that we don't presume that this particular CMC has done a case before or

understands the law.

And it can't be looking at 100 different bulletins and circulars and trying to -- you see how long we spent trying to understand some of the nuances. It might be a really good idea.

MEMBER VLIEGER: Dr. Markowitz, would you like an email?

MEMBER MARKOWITZ: Yes, I would like another email, Faye, yes.

MEMBER VLIEGER: Okay.

MEMBER MARKOWITZ: This is Steven. On time since first exposure, can I make a comment on that? Are we there yet or --

CHAIR WELCH: Yes, please.

MEMBER MARKOWITZ: So, here actually, we're really in the problem of causation versus aggravation, because COPD is, for the non-medical people on the phone, usually causes most trouble when a person has an exacerbation of the COPD, which can be provoked by cold or

exposures at work.

And so, it's easy to envision someone who did not work at DOE in their earlier career, moved to DOE, developed COPD, doesn't have 15 years since first exposure, but is exposed to dust and has an exacerbation. Which apparently is what I'm having right now. But, anyway. And it would clearly meet the aggravation standard.

So, it may be that we need to modify this time since first exposure, just to acknowledge that there are certain instances in which COPD could be recognized as aggravated with shorter time periods from first exposure.

CHAIR WELCH: The other option is to take it out. I mean, if we're looking at a five year exposure requirement, maybe we could get away without having a time since first exposure.

MEMBER DEMENT: This is John. I think that's probably the least supported piece

of this right now, is this time since first exposure. Can't you imagine somebody who had an intense exposure to vapors, gases, dusts, and fumes and developed COPD much quicker than 15 years?

MEMBER VLIEGER: Right, and also -- yes. I think it's too hard to explain and I agree, I think we should take it out.

MEMBER POPE: I agree.

CHAIR WELCH: Steven, what do you think?

MEMBER MARKOWITZ: Yes. I mean, simpler is better. Especially --

CHAIR WELCH: Okay.

MEMBER MARKOWITZ: -- in a CE-driven process.

CHAIR WELCH: Okay.

MEMBER MARKOWITZ: I'm just -- so, what we're left with is a VGDF or other exposures, with duration.

CHAIR WELCH: Right.

MEMBER POPE: Yes. And so many individuals have had other work and to look at time since first exposure, you would definitely have to assess that in other work and that's making it too complicated.

CHAIR WELCH: Okay. So, then, the alternative presumption here is, I'm trying to be pretty straightforward, any claimant with a physician's diagnosis of COPD who worked in any covered facility either in the labor categories in Attachment A or who reported exposure to VGDF on the OHQ for a period in which the aggregate totals at least five years -- and then take out the 15 years of time since first exposure -- is presumed to have sufficient exposure to toxic agents to aggravate, contribute to, or cause COPD. And when we want to -- additionally, they shouldn't deny claims if they have fewer than five years, those should be sent for IH and CMC review.

I think that follows pretty well

from the points above. And I'm going to edit it to take out the time since first exposure from all of them. Okay. And you all will get to see this one more time before I present it at our April meeting.

MEMBER MARKOWITZ: This is Steven. I have a -- I think this write-up is wonderful and I thank you for all the work, actually. But I have one suggestion on the rationale, which is specifically for the non-medical audiences, to explain that COPD, we really are in the heart of this cause, contribute, or aggravate issue, and that this is kind of the poster child condition in which we need to, and the players in the claims process need to recognize that this is a condition that really can be aggravated or contributed, rather than thinking predominately about cause, which is what I think most people are doing when they hear cause, contribute, or aggravate.

CHAIR WELCH: Yes, you're totally

right. And it's one in a way where it's, well, at least for me, it's easier to understand, because you can see it as a chronic inflammatory condition and how other exposures add on and can be contributory.

I can add some of that. I actually have some of the sort of biology of it in another paper, in our Collegium Ramazzini statement. So, I'll try to come up with something. I think it's a good point, I really do. I know it's more work for me.

MEMBER MARKOWITZ: Not a whole lot.

CHAIR WELCH: No, yes, not a whole lot. Because the -- there's one statement in here that a dust-response relationship has been seen, which is showing that additional exposures contribute. Yes, I'll work on that. And then, Steven, I'll send it to you and you can -- so you can wordsmith it before we put it in the final document. Okay.

I think we can probably get through

the other two without taking a break and be done by 3:00. Is there anybody who wants to take a break now? Okay.

So, the next question was whether -- really what I really was asking was, if we have really improved the OHQ, is there anything else we can do about sites that don't have a SEM? And that's probably for Faye and Duronda.

Are there things that, on sites without a SEM -- it seems that we're relying on the worker's occupational history and we have to have the claims examiners and the industrial hygienist accept that as prohibitive, because there isn't anything else.

MEMBER VLIEGER: The only thing that they could do is, in some of the labor categories that are actually a crossover to other sites or that have a link to other sites, to use those sister sites for exposures, or at least to start looking at the sister sites that they list for them.

I mean, it's kind of a fallacy to think that every site was doing things 100 percent different than any other site. So, if you had a nuclear process operator or a chemical operator, any of the other sites that they could draw from for the base exposure information, I think that that should be used. I don't think they do that now, because they don't have any direction to do that.

MEMBER POPE: I agree with Faye. There's not a lot that we can do without the SEM, but having those things that she mentioned in place, I think will help the process a little bit further.

MEMBER VLIEGER: And I have to tell you, the sites that don't have a SEM, the reason they don't have a SEM is because no one has taken DOL to task on it. Pardon me, I'm having one of those exacerbation moments, hang on.

It takes about 40 hours of work to

go to the DOE site record depository and look at characterization documents for the site and they all have them, it's just a matter of finding them and then turning them over to the SEM contractor.

When I was prepping to collect some errors on the Hanford SEM, I also looked at papers that were published in regards to new ways on how to handle waste for Hanford and the waste that they list in those documents means they were on the site and, therefore, they should be on the SEM.

So, there's a lot of corollary work that's already been done, but it takes somebody to actually go to that library and start pulling things out. So, it's not that there weren't laboratory tests done, it's that nobody's taken them out of the context of the DOE library.

CHAIR WELCH: And you think that's because the SEM sites have fewer workers, so

they think it's not worth the trouble?

MEMBER VLIEGER: I believe that to be the case, yes.

CHAIR WELCH: I was wondering whether, if the claims examiner receives a claim from an individual who doesn't have -- is from a site without a SEM, if -- I'm trying to think where this can happen.

Like, someone within DOL identifies that they don't have a SEM for this individual and then expands the Occupational History Questionnaire by looking at what we know about the person's labor category at other sites and says, oh, well, if you had been working at Rocky Flats, you would have done this, this, and this, did you do that at this plant?

And maybe that's, the only person who would do that would be the industrial hygienist when the case ends up at the industrial hygienist. It would be nice to do it before, but it may require -- it's probably

not something that the interviewer at the resource centers could do.

Can we recommend that the DOL sends the industrial hygienist information from other sites on the labor categories? If a worker is a -- has a labor category, but no SEM, that as part of their statement of accepted facts, they send to the hygienist information on that labor category from other sites?

MEMBER VLIEGER: I think it would be reasonable. They do it in radiation dose reconstruction. They look at the radiation dose from a co-worker or from comparable data, even if a worker doesn't have dose records themselves, then they pull it from comparable work or comparable data. So, I don't think it's a stretch to do it with chemicals.

CHAIR WELCH: Do we want to recommend that from our group? I don't think there's any way we can explore it further, I mean, we don't know the answers of how representative it is --

MEMBER VLIEGER: I think it's a start, to do something other than what they're currently doing.

CHAIR WELCH: Okay. I'll write up the recommendation and we can -- you guys can see if it makes sense.

MEMBER MARKOWITZ: This is Steven. I guess, if we recommend that, we should also recommend kind of a pilot period during which the industrial hygienists review those cases, look at those cases as well and they can take a look at whether that is a useful exercise or not, going to the SEM.

I mean, the whole thrust of our activities is to move away from the SEM, either through a better OHQ, through direct worker interviews by workers, through presumptions and here we are saying, rely on a faulty SEM. But it is better than nothing, so, yes.

CHAIR WELCH: Okay. That's a good idea, though, to evaluate it. Okay. So, then

for people without a SEM, they'll have the OHQ and they'll have information from other sites on the same labor category. Great, okay.

I'll move on to the last point, unless anybody's got any other comments on sites without SEMs. Which was, are there additional recommendations from the IOM?

One reason I didn't send it to our Subcommittee was, when I went back through the executive summary of the IOM report and pulled out their recommendations, I thought that these are really -- they're not so much exposure assessment questions, as much as big Board questions, because it really -- the IOM report fell into three different big categories.

Supplemental information for the health effect information imported from the Haz-Map, and we've already made a recommendation about that, pulling in information from the table that the IOM report had provided, ATSDR, EPA, IARC, other ones.

So, I think we have addressed that one recommendation.

The second one was to improve the structure and function of the SEM and doing a quality control review of the SEM. That's all internal to DOL and I didn't think we could add anything, because those people at DOL understand the structure and function of the SEM better than we do.

I think that they, in DOL's report to us about how they responded to the IOM report, they have taken action on some of these items. And I think, if we follow Faye's suggestion that we have them do a demonstration about how they adapted the SEM for this direct disease link process, we may be able to get an idea how they're doing on quality control review.

The third one, the third big recommendation was the use of an external advisory panel to review the health effect

information in SEM. And in the IOM report, they actually imply that our Advisory Board should be that.

I think at our first Board meeting, we decided it was a much bigger project than we could take on, which is why I kind of pondered this one with Steven to decide how we should approach it.

The IOM divided it into things that could be done right away and ongoing support to the DOL on putting in new links in SEMs and then assessing new occupations and ongoing support on exposure and causation.

So, I didn't think that we needed a discussion about the structure and function of the SEM or how to get them to do an external advisory panel within our Committee, I think that should be a big Committee discussion, but, Steven, if you think we need to talk about it, let me know.

MEMBER MARKOWITZ: Are you talking

about further discussion of IOM recommendation number 3?

CHAIR WELCH: Yes.

MEMBER MARKOWITZ: Yes. So, this recommendation really kind of gets at, I think, the capacity of DOL to exercise some science, some very informed kind of decision making about the SEM. And otherwise, because it also applies to their decision making outside of the SEM, when the issues go to the National Office for determination.

And so, the -- my own feeling so far, and we're still getting into this, that they need enhancement of their scientific capacity to deal with issues and multidisciplinary. And it's not a -- at a central level, not just at the IH and the CMC level.

And that could be kind of in-house, but it could also be contracted out. But if you could imagine a highly qualified unit or

effort, looking at some of these things with this IOM recommendation number three, the process would get a lot better.

CHAIR WELCH: Yes. Yes, I mean, they recommend -- they point out that there's really been no peer review of Haz-Map and the existing causal link system could be tweaked, that's currently based on Haz-Map, and that could be either explained or defined or evaluated.

I guess, the Board could recommend that this be addressed with addition of internal staff or an external advisory panel, but if there's an external panel, there would really need to be a contract for ongoing work.

I think that our Committee, is really structured -- well, the process isn't structured to do this kind of work and it also could be quite a bit of work and we would need staff support.

I thought it's probably better to have, if it were possible, to have an outside

committee that does the work, rather than internal, just because if it's internal, it can rely on one person's ideas or knowledge, not likely to have a big internal committee.

From outside, you could have a small amount of more people's time and who are more likely to have quality control within that committee. I also don't think that -- it's just my -- I accidentally printed --

But I don't really know, I don't really know how to -- maybe it is related to the SEM and maybe we should address it in our next conference call, about how we -- I mean, because it is -- but it's a big question, because an external advisory panel to review the health effects information in SEM, but it's really establishing the criteria for causation and making sure that the right information is available to the claims examiner on causation.

I don't think you can build it all into the SEM, because the SEM is too, it's not

even too complicated, but it's too awkward. I mean, every, it seems like every time people who are advocating for the workers go into the SEM, you find things that are missing or that say give you different tasks for the same job title, depending on how you approach it.

There's so much that needs fixing, it just doesn't seem like we should spend a lot of time loading more information into the SEM, but they do need more help on causation.

MEMBER MARKOWITZ: This is Steven. I just -- we can use the example COPD as sort of a little bit of a window into some of the issues. The bulletin addressing COPD is, I think was entirely restricted to asbestos.

CHAIR WELCH: Yes.

MEMBER MARKOWITZ: And then, there was some language early, I think developed early on that was pretty nonspecific, not all that -- not providing all that much guidance. And Laura and John spent some time, they had a

head start because they knew the issue, worked with the issue, but regardless, spent some time assembling the relevant science and summarizing it.

That needs to be done on a regular basis, not by special outside committee, but internalized into the DOL compensation program. It would make their lives enormously simpler and would be, we hope, fair to the claimants.

And it's not that, I don't know how complicated that particular task was, but it wasn't impossibly complicated. And we're going to do the same for asbestos and we'll do the same for hearing loss and solvents.

And so, they need the capacity to do that on an ongoing basis. I think, my concern is that, and it's not really a criticism, but that they've -- this has not been an emphasis in the past and I don't know how to change, what we can do to kind of change that. And so, that there may be -- the Radiation Advisory

Board has a contractor that they work with paid by DOL that does those, checks on those reconstructions.

And it may be that a parallel effort, where there is an outside contractor who is working up these issues, but that we place some role, at least for the whatever next period of time, in helping to guide that process, so that we don't -- we don't have the time or capacity to do that ourselves, but we can be helpful in steering it. So, that might be an idea.

CHAIR WELCH: Yes. There was a list of 17 items that DOL asked us about, a number of them related to causation, and those would be places to chart, then you could have a contractor develop the background materials.

MEMBER MARKOWITZ: And the National Toxicology Program, when they look at an agent, they spend a long time identifying what agent to look at and getting a lot of input from

various sources, but ultimately they use a contractor to kind of work up the issue, according to their recipe.

But -- and the contractor drafts the document and it goes back to NTP and they have scientists who modify it and then present it to external boards. But this is -- there's a precedent for this, in fact, for a very related issue.

CHAIR WELCH: I think when we discussed this recommendation before, we did, the Board, and I don't know, I don't think we made a specific recommendation about it, but when we discussed the IOM report, there was a sense that, that's what we would like is that the Board could be of assistance, but there would have to be contractor support.

And now we've given a good example, how NTP does it, and that's also how the Institute of Medicine does it for their committees, they provide the materials and they

don't have to -- well, they do write a report based on the meeting, but they do the background research and provide all the materials.

MEMBER MARKOWITZ: So, should we recommend this and also recommend that our Advisory Board play a role in helping to formulate and initiate and kick off this process?

MEMBER VLIEGER: This is Faye. I would like to see it happen.

MEMBER POPE: I agree.

CHAIR WELCH: I think it's reasonable. I think they need it. Steven, do you want me to write something or -- I think you have, I really do think you have a better grasp than I do, but I can write something and you can edit it or you could write it yourself.

MEMBER MARKOWITZ: I'll write it, I mean, it's not going to be a big rationale, but I will draft something and send it to you

initially and then, you can --

CHAIR WELCH: Okay.

MEMBER MARKOWITZ: -- modify it and circulate it.

CHAIR WELCH: Great. I feel like, I'm very happy with what our Committee has been doing, I feel like we're making a lot of progress. And if we can get our recommendations implemented, it's going to make a big difference. So, that's great. Any last thoughts on anything we've discussed before we end the call?

MEMBER VLIEGER: This is Faye. We made recommendations from the IOM report at the October meeting and I was just wondering, have we heard anything back from the Department of Labor on the implementation of those recommendations?

MEMBER MARKOWITZ: Well, the only -- this is Steven. The only action that's been taken, definitive action, was rescinding that

one bulletin or circular. The others, I'm told, I think some of them have made it to the Secretary's Office, but not much is moving there. They're at various stages.

There's nothing official. We will get, both Rachel and Gary Steinberg will be at the meeting in Washington, so we'll get a firsthand report then. And there may be additional progress between now and then, but that's all I know.

MEMBER VLIEGER: Okay, thank you.

MEMBER MARKOWITZ: This is Steven. So, I agree that this Committee has done fantastic work. So, this means we can't dissolve this Committee, just because it has taken on major issues successfully.

CHAIR WELCH: Now that we've finished everything that has to do with the SEM, you're going to give us other things to do?

MEMBER MARKOWITZ: Yes, sure. To be discussed.

CHAIR WELCH: All right. Well, do you have anybody, not that I'm volunteering to do it now, but is there anybody writing a presumption on hearing loss? Is anybody fixing that presumption?

MEMBER MARKOWITZ: Yes, I don't have a volunteer yet and it would be extremely helpful to boil that down. We have the SOAFs memo, you presented your PowerPoint, Rosie has the work that she's done, although I haven't seen anything in writing, but that may not be remembering everything.

But, yes, and we discussed in the presumptions committee call last week, right, certain aspects of that, but it hasn't been formulated into a recommendation or a rationale. So, Laura, not to burden you, but if you had some time, that would be great. I'm going to be working on, first, the asbestos one. And if we had three to present, finished ones, that would be great.

CHAIR WELCH: Well, I mean, if I write one up, it would be -- I don't think our Committee would have time to review it, but I think we've talked about it enough that maybe that would be okay. We could write one up and have the whole Board discuss it, because we don't have time for another call prior to the April meeting.

MEMBER MARKOWITZ: Right. Yes, I agree with that. But you can circulate it --

CHAIR WELCH: Yes.

MEMBER MARKOWITZ: -- and people can look at it.

CHAIR WELCH: Yes, okay.

MEMBER MARKOWITZ: But we've discussed it repeatedly and more than probably some other issues, people seem to be primed and involved with this issue.

CHAIR WELCH: Okay. I will do that. Or I'll try. I have a feeling that I've essentially written it before, I think there's

a couple of things, bit of information I'm missing, like not too much, but what's the right amount, that kind of question.

MEMBER MARKOWITZ: Well, if you need some help digging up articles or any support work, I'd be glad to supply it, so just let me know.

CHAIR WELCH: Okay, great. I'll work on that. Okay, guys, thank you very much.

MEMBER MARKOWITZ: Thank you.

CHAIR WELCH: And I'll see you all next month.

MEMBER VLIEGER: Okay, thanks. Bye, guys.

MEMBER POPE: Thank you.

MS. RHOADS: Thanks, everybody.

MEMBER POPE: Bye-bye.

MEMBER MARKOWITZ: Bye.

(Whereupon, the above-entitled matter went off the record at 2:36 p.m.)