UNITED STATES DEPARTMENT OF LABOR

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ADVISORY BOARD ON TOXIC SUBSTANCES AND WORKER HEALTH

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MEETING

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**THURSDAY,
APRIL 20, 2017**

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The Advisory Board met at 8:00 a.m. Pacific Time, at the Red Lion Hanford House, 802 George Washington Way, Richland, Washington, Steven Markowitz, Chair, presiding.

MEMBERS

SCIENTIFIC COMMUNITY:

JOHN M. DEMENT
MARK GRIFFON*
KENNETH Z. SILVER
GEORGE FRIEDMAN-JIMENEZ
LESLIE I. BODEN

MEDICAL COMMUNITY:

STEVEN MARKOWITZ, Chair
LAURA S. WELCH
CARRIE A. REDLICH
VICTORIA A. CASSANO
ROSEMARY K. SOKAS**

CLAIMANT COMMUNITY:

DURONDA M. POPE

KIRK D. DOMINA

GARRY M. WHITLEY

JAMES H. TURNER

FAYE VLIEGER

DESIGNATED FEDERAL OFFICIAL:

DOUG FITZGERALD

***Participating via telephone**

**** Not Participating**

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P R O C E E D I N G S

8:05 a.m.

CHAIR MARKOWITZ: On the phone do we have Mr. Griffon? But we do not have Dr. Sokas, correct? Okay. She's --

MEMBER GRIFFON: Yes, Steve, I'm here.

CHAIR MARKOWITZ: Okay. Great. Okay.

MR. FITZGERALD: Good morning everyone. My name is Doug Fitzgerald. And I'd like to welcome you to this meeting of the Department of Labor's Advisory Board on Toxic Substances and Worker Health.

I'm the Board's Designated Officer or the DFO. I want to, on behalf of the Department, thank the Board and the Chairman for all their hard work yesterday. And for their forthcoming deliberations.

As the DFO, I serve as the liaison between the Board and the Department. I'm also responsible for ensuring all provisions of the Federal Advisory Committee Act are met regarding the operations of the Board.

I work closely with the Board's Chair, Dr. Markowitz. And I'm responsible for approving the meeting agenda and for opening and adjourning these meetings.

I also work with the appropriate agency officials to ensure that all relevant -- or excuse me, to ensure that all ethics regulations are satisfied.

You will note that the agenda times are approximate. So we'll try as hard as we can to stay with the agenda.

But, because we had some leftover business from yesterday, we'll be jumping around a little bit, I think, in addition to that. But we'll be mindful of the break times as well.

Copies of all meeting materials are or will be available on the Board's website under the heading meetings. The Board's website can be found at dol.gov/owcp/energy/regs/compliance/advisoryboard.htm.

Or you can simply Google Advisory Board on Topic Substances and Worker Health, and

it will likely be the first url that comes up. If you haven't already visited the Board's website, I strongly encourage you to do so.

After clicking on today's meeting date, you'll see a page dedicated entirely to the week's meeting. That page contains all material submitted to us in advance of the meeting.

If you're joining by WebEx, please note that this session is for viewing only, and will not be interactive.

And I just wanted to point out, in case there's an emergency, there are two exits at the back, on the left and the right. So, if there is an emergency of some kind, hopefully that won't occur, just exit through those doors.

If you need to use the restrooms, they are immediately to the right on the way out.

I also want to note that the FACA requires that the minutes for this meeting be prepared to include a description of all matters discussed over the course of the meeting. And any conclusions reached by the Board.

As DFO I prepare the meeting minutes and ensure that they're certified by the Board's Chair. The minutes of today's meeting will be available on the Board's website no later than 90 calendar days from today per FACA regulations. But if available sooner, we'll have them published before the 90th day.

Also, although formal minutes will be prepared, because they're required by the FACA regulations, we'll also be publishing verbatim transcripts. And those will be available by May 20.

And with that Mr. Chairman, I convene the meeting, and turn this over to you.

CHAIR MARKOWITZ: Thank you. I echo Mr. Fitzgerald's welcome to the public for participating, those of you who are on the phone and those of you who are present as well. And I welcome back the Board members.

Let's redo the introductions today in the event that we have some new public participants.

I'm Steven Markowitz. I'm an occupational medicine physician and epidemiologist at the City University of New York. Ms. Pope?

MEMBER POPE: Duronda Pope, United Steel Workers Emergency Response Team. I was a former worker at Rocky Flats 25 years.

MEMBER CASSANO: Tori Cassano, occupational medicine physician, retired military. And Department of Veterans Affairs.

MEMBER WELCH: Laurie Welch. I'm also an occupational medicine physician. I work for the Center for Construction Research and Training.

MEMBER WHITLEY: Gary Whitley, former worker developer of National Security Complex. And work with the Worker Health Protection Program.

MEMBER DOMINA: I'm Kirk Domina. I'm here representing the Hanford Atomic Metal Trades Council here in Richland, Washington. I am a current worker. I've been onsite for 34 years.

MEMBER DEMENT: John Dement, industrial hygienist and epidemiologist at Duke University in Durham, North Carolina.

MEMBER FRIEDMAN-JIMENEZ: I'm George Friedman-Jimenez. I'm an occupational medicine physician and epidemiologist at New York University School of Medicine and Bellevue Hospital, New York City.

MEMBER SILVER: Ken Silver. I'm an Associate Professor of environmental health in the College of Public Health at East Tennessee State University.

MEMBER REDLICH: Carrie Redlich, I'm a Professor of Medicine at Yale and Director of the Yale Occupational Environmental Medicine program. And I'm also an epidemiologist.

MEMBER VLIEGER: Good morning. Faye Vlieger, former Hanford worker, injured Hanford worker from a chemical exposure in 2002. And advocate for the injured workers.

MEMBER TURNER: James Turner. I worked at Rocky Flats plant for like probably 26

years. Was diagnosed with chronic beryllium disease in 1990.

MEMBER BODEN: Hi, I'm Les Boden. I'm a Professor of occupational environmental health at Boston University School of Public Health.

CHAIR MARKOWITZ: Mr. Griffon?

MEMBER GRIFFON: And I'm Mark Griffon, a health physics and occupational and safety and health consultant.

CHAIR MARKOWITZ: And yesterday we all had the Board member, Dr. Rosemary Sokas, who's an occupational medicine physician. And she couldn't be with us today as scheduled actually.

So, we're going to change the agenda a little bit. We're going to finish some of our business from yesterday. And then move onto the Part B lung conditions subcommittee report.

And the -- we're going to first address an issue that was left over from a discussion around chronic obstructive pulmonary disease, COPD. I'm going to turn it over to Dr. Welch to lead this discussion.

MEMBER WELCH: As you all remember, we had tabled the question of work outside DOE. I had originally included it as part of the exposure criteria.

I talked some to the Department of Labor representatives. And we had some discussion among our SEM subcommittee.

I looked up the legislative language and we figured that it's too -- it's -- would be like giving the legislative history of the program, which has focused solely on DOE work that it's really not appropriate for us to change it.

I mean, it's kind of like the -- it's not specifically written that way in the legislation. But, you can see how the intent would be that. That's always been the focus of the program.

And so my amendment, although we did vote on the slide for the criteria, absent consideration of outside exposures. So, what I'm proposing as the final COPD presumption would be

everything we had, but no mention of outside exposures in the presumption.

So, it would be five years exposure in the specific job titles. Or exposure -- yes, this is the legislative language, but I decided I wasn't even going to renew them and they need to cover it.

For reported history to vapors, gas, dust, and fumes on the occupational history questionnaire as revised. And that that's the exposure assumption for COPD without direct discussion or required consideration of outside work.

So that's the proposal. So, in some ways -- we've already voted on it. Except we voted on it understanding that we would revisit the outside work.

So, if we -- I'd leave it up to you whether we want to bring up that slide again and vote on it.

CHAIR MARKOWITZ: Well, why don't we bring up the -- what we voted on yesterday.

MEMBER WELCH: Okay.

CHAIR MARKOWITZ: If we could.

MEMBER WELCH: So Kevin, could you open the COPD one? Yes. There we go. So, go down another slide. There. This is it.

So, what we -- we voted on this, but we -- in speaking of it, we're excluding when we voted the parenthetical. So that including non-DOE work. With the idea we'd come back to it.

CHAIR MARKOWITZ: Right.

MEMBER WELCH: So what I'm suggesting as an amendment now, is we would delete the including non-DOE work. And have it otherwise stay as the same.

CHAIR MARKOWITZ: But, that's what we voted on yesterday. In other words, we voted on this recommendation, removing the two phrases where -- in parenthesis where it said, including non-DOE work.

MEMBER WELCH: That's correct.

CHAIR MARKOWITZ: Okay. So, we -- I think we can just let it -- yesterday's

recommendation stand. And the live issue for today was whether we wanted to come add non-DOE work.

And I think you're saying, let's not add non-DOE work.

MEMBER WELCH: Right. That's my recommendation. Let's not add it. But I think we should in some ways get at least an informal consensus of the board on that question, because we did say we were going to come back and revisit it.

Yes, could you -- Kevin, could you take out the parenthetical that says, including non-DOE work in the -- those two bullets?

CHAIR MARKOWITZ: So, while he's doing that, is it open for discussion now?

MEMBER WELCH: Yes.

CHAIR MARKOWITZ: Dr. Friedman-Jimenez?

MEMBER FRIEDMAN-JIMENEZ: I agree that for perceptual reasons it's probably better to take out non-DOE work. However, the five years

seemed reasonable, including non-DOE work.

So my question, and I'd like Dr. Redlich to comment on this also. My question is, what does the science say about how much exposure you need to get COPD from the exposures involved?

Could we reduce the five years to say three years or two years? What is the suspicion amount of exposure if we're not including DOE work in the formal definition?

We should probably shorten the DOE time. Because on average, most people will have additional exposures that contribute in the way -- - in an additive way at least.

MEMBER WELCH: The -- let me just comment on that. That there isn't a lot of population-based studies that look at the overall metric, not specific exposures, don't have -- they're looking at long term populations generally. So the only study I could find that looked at VGDF overall that was -- well, it wasn't even in the publication.

But John was able to look at it in our

construction workers. And it looked like five years was the -- five years cumulative exposure was where you start to see an increase in COPD.

You're correct that we could decide to go four or three with the understanding that it's most probable that people had other exposures. Or we could go with five and then the people who have four or three can come in with an individual evaluation.

And that -- so their treating physician or the industrial hygienist could, in an individual evaluation, look at their total exposure without it being written in our presumption.

And that's a -- I was kind of approaching it that way in my mind. But I would still continue to -- for individual people, look at their total exposures.

But to recommend it as a specific presumption seems out of keeping with a legislative history.

CHAIR MARKOWITZ: Dr. Redlich?

MEMBER REDLICH: I agree with Dr. Welch. I think the reason it gets a little more complicated is just that there's so much overlap between asthma and COPD.

And you know, shorter term exposures can cause asthma. The Germans actually lump as -- when they look at work-related obstructive lung disease, they actually treat asthma and COPD as one entity that they term OLD. You know, occupational obstructive lung disease.

And so I think that's where one could potentially argue for a shorter time period. It's not a, you know, a crazy thought.

But I think given the literature and these circumstances, it's reasonable to use the five years.

CHAIR MARKOWITZ: Dr. Boden, did you want to say something? No.

You know, I think it's hard to make a decision based on an assumption that a person otherwise had some years of exposure to VGDF outside of non-DOE work. We're saying that we

can't really justify looking -- in this program, in looking at non-DOE work.

And then the suggestion is well, we can assume that blue collar workers generally do blue collar work in their careers. And therefore it's likely that they have outside.

But that's an assumption. And it's hard -- I think it's hard to build a compensation program on that kind of assumption. Even though there's some scientific validity to it.

So, I guess I would favor the five -- staying with the five years. And then in the non-presumption at root, then on an individual basis, it goes through the normal process of looking at the exposures and judging whether there's a contribution from two or three or four years of exposure to the disease.

Mr. Domina?

MEMBER DOMINA: I just want to make sure, because I don't have 16-02 in front of me that we're not excluding AWE. Because say a guy worked at an AWE site for a couple of years and

then he went to work for DOE, that that's included in the five-year total.

CHAIR MARKOWITZ: Yes. You know, Ms. Leiton, could you address that issue? Because that's a coverage issue.

MS. LEITON: Okay. So if it's covered employment, and it's an AWE or DOE facility, whatever, actually, I'm sorry, AWEs are only covered for cancer.

So the cancer conditions would be the only ones that would be included in that. Because we don't cover anything other. And Part E is not covered. So never mind.

We don't do AWEs because they're not covered under Part E. So, it wouldn't -- the other part, it would only be Part B coverage.

So, let me just be clear about that again. AWE coverage does not extend to Part E. Since this is a Part E presumption, it would not cover for AWE employees.

CHAIR MARKOWITZ: Further discussion? Dr. Redlich? Dr. Silver?

MEMBER SILVER: A rationale statement will accompany this recommended set of presumptions. Maybe that's the place to elaborate on non-DOE exposures around that last point of the presumption.

Non-binding guidance, but at least put it on the record for the program to remember when they evaluate individual claims.

CHAIR MARKOWITZ: That's a good point. Other comments?

(No audible response.)

CHAIR MARKOWITZ: So Dr. Welch, is there a -- do you think there's a need at all for something to vote on? Or are we okay? Okay.

Okay, so if we could move to my slides. We're going to discuss occupational asthma.

MEMBER GRIFFON: Hey Steve, this is Mark Griffon.

CHAIR MARKOWITZ: Yes. Yes?

MEMBER GRIFFON: Just before you leave the issue, just one thing. I mean, this might be

a little tricky, my mind was just on it.

But, the way it's written right now, it's a five-year aggregate as reported on the OHQ. I think it supposed to be five year aggregate as verified by the Department of Labor, right? At any code facility?

I'm not sure if that's not important. I mean, I think we've got the nature of the recommendation across. But, --

MEMBER WELCH: You know, I kind of think that it's kind of assumed that --

MEMBER GRIFFON: Okay.

MEMBER WELCH: But, I mean, I wish we could just use the OHQ. But I know that the process doesn't work that way.

MEMBER GRIFFON: Yes.

MEMBER WELCH: So we could say five years cumulative covered employment. If you think that's important.

MEMBER GRIFFON: Right. I don't know that we have to revote or anything. I'm just --

CHAIR MARKOWITZ: No, but looking at

the language, the only place where OHQ is mentioned is with reference to vapors, gas, dust and fumes. And that's the only place where it's asked.

In other words, the OHQ is -- if it's changed, that's going to be the only location where that specific question is asked and documented.

MEMBER WELCH: But for example, let's say women in -- yes, we see this in construction. They say they worked for, you know, seven years at Savannah River.

But what can be considered covered employment is like a three-month period in the middle of that. And two years, and you know, it's broken down and maybe not all of it is verified. And so not all of it is covered.

So they report something that would get them in under the presumption. But then the amount of years that are accepted by the Department of Labor as covered employees -- or covered employment would put them under the five

years.

And that's likely to happen. But I assume that that is going to happen. Because that's, you know, exposures -- if there's no covered -- if the employment isn't verified as covered employment, then it's just not considered under the way the regulation works.

So, I was assuming we didn't have to put that in there. In this presumption.

CHAIR MARKOWITZ: Okay. Ms. Leiton?

MS. LEITON: I just would say, I look at this like my lawyers are going to look at it when they see it. And if they see with reported exposure to VGDF on the OHQ, that's what that says.

I mean, it doesn't say verified or anything like that. So, you know, and other people will think well, if I just put it on the OHQ, I'm good.

And that might be a problem for us when we're trying to administer. I'm just putting that out there.

And when I know that other people looking at these recommendations might say to me -- well, you know, I don't know for sure, I just want to put that out there.

I think it's a good point. Because it does say reported exposure on the OHQ. We verify these in other ways. We get this information from DAR records. We might get it from other sources.

It might not be on the O -- you know, there's just a lot of different variations of saying, on the OHQ. So it's, you know, I'm not trying to tell you either way to do it, but that's just probably what they're going to look at and say to me.

MEMBER WELCH: And so what we were talking about was something slightly different.

MS. LEITON: Okay.

MEMBER WELCH: Whether or not verification of the exposure itself, but should we say covered employment? Because this is implying if they were --

MS. LEITON: It does. I mean that would help.

MEMBER WELCH: Would help to put that in there? Okay.

MS. LEITON: It would probably help.

MEMBER WELCH: Okay.

CHAIR MARKOWITZ: Dr. Boden?

MEMBER BODEN: So, I thought that our discussion yesterday actually kind of contradicted what you just said. That is, our discussion yesterday was a suggestion that the revised occupational health questionnaire, with what detailed information from the worker, could actually be used without external verification.

MEMBER WELCH: Absolutely.

MEMBER BODEN: Is that correct? Yes. Okay.

MEMBER WELCH: That was the -- and I specifically pointed out that the direct disease work process link bulletin says that the workers report can be considered probative.

So, I think -- yes, what I'm thinking

is that the -- it's not just reported exposure to VGDF, it includes all the task information. Which helps to validate the exposure.

So it's not the answer to that simple question that allows them to accept the claim. So, I mean, there's the option of -- and I don't know, Steven, do you want to spend any more time on this?

We've got to -- we kind of have to move on.

CHAIR MARKOWITZ: No.

MS. LEITON: Can I make one more comment on that?

MEMBER WELCH: Yes.

MS. LEITON: If you're talking about coverage, you do say at the first sentence, covered facility. So, it would have to have been at a covered facility.

So if that's the issue, I think you've got that in the language.

MEMBER WELCH: Okay. Great. Thanks. Good.

CHAIR MARKOWITZ: Okay. Good. Great. We can move on. So, if we can bring up the PowerPoint on occupational asthma. So, it should be after that.

What slide is -- are we on? Because we covered this yesterday.

MEMBER WELCH: Yes. This is not the right slide.

CHAIR MARKOWITZ: Okay. So just go to the end and then go back about six slides.

MEMBER WELCH: Oh, it's in this slide presentation?

CHAIR MARKOWITZ: It's all in the same presentation. So, I'm going to talk about the current policies on occupational asthma, written policies.

And if you go up one slide, let me just -- yes. Yes, that would be great. Okay. So, just a quick review on the current written policy on asthma.

Which is that if there is medical evidence of occupational asthma, there's no need

for an exposure assessment or consultation with the SEM. Because the exposure's assumed to occur if the medical evidence is presented by in general, the treating physician.

For occupational asthma claims that are filed after the Department of Energy work ends, so this is for retired workers, it requires a well-supported report by a physician, meaning the treating or evaluating physician. And if that isn't present, then the CE collects exposure information and refers it to the CMC for evaluation.

For asthma claims that are not -- that do not have presented with them a well-supported rationale for work-relatedness, the CE develops the claim and just refers it to the CMC. And then there is a retroactive look with the institution of this policy in 2015, to look at previous asthma cases and make sure they complied with this guidance.

Now, the draft document that was sent to us a week ago, on exposure and disease

presumptions, significantly changes and tightens up the requirements for occupational asthma. And in particular, it requires objective verification of or -- of the asthma by pulmonary function testing.

And so why don't I discuss just a few things in general about asthma, about work-related asthma, and then get into a recommendation. So, work-related asthma is considered to be quite common. And causing up to 25 percent of adult onset asthma.

Dr. Friedman-Jimenez wrote a review a year and a half ago on occupational asthma. And cited that there are over four hundred workplace agents that are known to cause asthma.

In clinical practice, the basis for diagnosing asthma varies considerably among healthcare providers. Often based on the history and a trial of bronchodilators. Sometimes based on pulmonary function testing.

But it's a lot of variation, which some of the physicians here can speak to. And

that work-related asthma is frequently diagnosed without the pulmonary function confirmation in practice.

So, I'm going to -- I have a recommendation that involves two or three slides. And then a little bit of rationale mixed in.

So, the recommendation is that DOL should use the generally accepted unifying term, work-related asthma for claims evaluation and decision-making. Work-related asthma includes two forms of asthma.

One is occupational asthma, which is new onset asthma that has initiated by an occupational agent. The worker didn't have asthma before. They develop asthma. The physician identifies it in relation to a specific exposure in the workplace.

There's also a second type of work-related asthma, which is work-exacerbated asthma. Which is established asthma, the person already has asthma, or otherwise developed asthma, and it's worsened by workplace exposures.

The recognition of both forms of work-related asthma should be communicated to claimants, the physicians, and consulting industrial hygienists and CMCs. And this is important because physicians vary in their thinking about work-related asthma.

Some physicians maybe sticking with A, only occupational asthma, whereas it's recognized that work-related asthma encompasses a much broader spectrum, not just occupational asthma, but also work-exacerbated asthma.

And the background behind this is that this definition exactly coincides with the recommended usage of the terms by the American Thoracic Society from the 2011 statement, and the American College of Chest Physicians in 2008. And Dr. Redlich served on both of those committees and is a coauthor on these recommendations that were published.

This inclusive and well delineated definition is also very conveniently consistent with the standard of causation in EEOICPA. Which

is to say, at least as likely as not, exposure to toxic substance was a significant factor in aggravating, contributing, or causing.

So, both the occupational asthma form and the work-exacerbated form of asthma meet the standard of aggravated, contributed or causing.

So the second part of the recommendation that is, met the criteria for the diagnosis of asthma. The diagnosis of asthma by a treating or evaluating physician should be sufficient for the recognition that the claimant has asthma.

Bronchodilator reversibility of FEV1, which is a pulmonary function test, and/or a positive methacholine challenge test, which is another form of breathing test, maybe helpful, but should not be required to accept a diagnosis of asthma, which is made by a healthcare provider.

And then I think this is the third, the last part of the recommendation. So what I just reviewed was how the diagnosis of asthma

should be looked at in the claim. Now we move onto how the diagnosis of work-related asthma should be looked at.

Work-related asthma, whether occupational asthma or work-exacerbated asthma is defined as the presence of medically diagnosed asthma that is associated with the worsening of any of one or more, or is key here. One or more of the following in relation to work: asthma related symptoms, meaning shortness of breath or wheezing, asthma medication usage, which is temporarily related to work, or pulmonary function indices, and then I list the various recognized means, meaning change in FEV1 or the peak expiratory flow rate, bronchial hyper responsiveness or a positive inhalation challenge test.

Such a history should be documented by the treating or evaluating healthcare provider, or addressed by a CMC if consulted in a claim evaluation.

The same criteria for work-related

asthma should be used in evaluating asthma claims whether the claim is made contemporaneous with the period of DOE employment, or after the end of that period of employment.

And a specific triggering event causing the onset of work-related asthma may occur, but is not typical or necessary. Inciting exposures, such as dusts, fumes, heat or cold or others, should be specifically identified when possible, but should not be required for the diagnosis of work-related asthma.

And so, -- and then just I just provide the American Thoracic Society criteria for work-related asthma from their 2011 statement.

This is the work-related -- the work you actually -- this is the work-exacerbated asthma, which is the person -- criteria one, the person has asthma already. And criteria two, which is that there's a clear temporal relationship between symptoms or medication use, or objective indicators, and the asthma symptoms.

So, let's open for discussion. Dr. Welch?

MEMBER WELCH: I strongly support the use of, you know, well developed, peer reviewed criteria for the diagnosis. So, I think that's a good improvement.

CHAIR MARKOWITZ: Dr. Redlich, you're a Pulmonologist.

MEMBER REDLICH: Yes. You know, and I am -- I am actually -- I apologize, the internet wasn't working last night. I had emailed back some minor edits to this.

I agree with this approach. I think it's also just important to understand that the evidence-based guidelines that are out there, you know, some of which encourage things like trying, you know, confirming asthma with a bronchodilator, or doing peak flows, were really developed for a pulmonologist who is, you know, evaluating a patient real time with work-related asthma. Or with potential work-related asthma.

And also must of the literature that

that is based on is sensitizer agents. And predominantly European and Canadian literature.

And so I think it's just important not to extrapolate that to U.S. workers. And the situations where someone is using these guidelines based on medical records that they are reviewing.

And as an example, it's very commonly stated in these guidelines, which I tried to actually modify this. That, you know, you should do peak flows at and away from work to confirm the association with asthma.

And so that then implies that if you haven't shown that association with peak flows, maybe it is not work-related. That literature is based on the relatively rare cases of work-related asthma where there is a single sensitizing agent.

And also studies from the 1960s, 1970s, largely in Europe where a worker would be removed from work for three weeks, during which three weeks away from work, their lung function

would improve enough that their peak flows would be better. Then they would be put back at work for three -- two to three weeks.

And so we in the United States don't have the ability to do a diagnostic test that involves removing someone from work for two to three weeks. And then, you know, sending them back to work.

So unfortunately some of the pieces of the guidelines get extrapolated in a way that because that documentation is not available. And the other one that is unfortunately used inappropriately is, confirming asthma with a bronchodilator response.

The great overwhelming majority of asthmatics in the United States and beyond, have a clinical diagnosis of asthma. But have not had spirometry at all, let alone spirometry that shows a 12 to 15 percent improvement following an inhaled bronchodilator.

And there are multiple reasons why even if you had the test done, it can be falsely

negative. So I just mention that, because there's some sort of common misconceptions in some of these guidelines when they get applied to current day workers.

CHAIR MARKOWITZ: Ms. Vlieger?

MEMBER VLIEGER: Having gone through my asthma claim prior to this type of rationale, I can tell you that this will help the workers to no end. Because it is so difficult for them to know first of all, what's wrong with me?

To get into a pulmonologist is difficult. I had it reported to me today by a claimant that he's trying to get into see one of the local Pulmonologists here, and we have a pretty robust community of doctors, and it's two to three months out, you know, to be able to get in to see them.

So, in the past, the Department of Labor has really wanted them to see a specialty doctor. So if this can be brought back to an initial diagnosis that's accepted from the family practice or general practice doctor, that would

be very helpful in getting them an initial diagnosis accepted by the Department of Labor.

CHAIR MARKOWITZ: Dr. Boden?

MEMBER BODEN: So, I was very interested to hear Dr. Redlich's description of the problems with the pulmonary function tests when they're using the bronchodilators. In looking at a few claim files, I did see those tests being used.

And it occurs to me that since, as you put it, there can be a lot of false negatives on that test that perhaps there should be guidance to claims evaluators about not putting too much weight on a false -- on a bronchodilator PFT. Is that correct?

Am I saying that correctly?

MEMBER REDLICH: Yes. I think that's correct. I think the current document needs major revisions.

And that would be one of them. I mean, asthma's a clinical diagnosis made by a treating clinician or, you know, physician.

Another way to word that is, we have a very extensive asthma clinic at Yale, and if you actually look through -- well we're -- you can't get in to be seen unless you have asthma. And the physicians, the asthma specialists believe all those patients have asthma.

And the great majority of them do not have a positive bronchodilator. And I could go into various issues with the testing and the like.

But, that should not be a requirement for a diagnosis of either asthma or work-related asthma.

MEMBER BODEN: I'm sorry. I was just wanting to make the point that also that the existence of a negative test should not deny the claim.

MEMBER REDLICH: Oh, absolutely. I -- that's correct. And unfortunately, that is -- and in fact, when this has been looked at, the great majority of cases that have been diagnosed with work-related asthma in the United States and

also in Canada, do not have a positive bronchodilator.

CHAIR MARKOWITZ: Dr. Cassano?

MEMBER CASSANO: Two questions. Could we just go to the second slide with the criteria that you -- that you had -- no. Or yes. Okay.

I guess what I'm concern -- I agree with this fully. But from a practical standpoint, most primary care doctors that I know, or that I've worked with, yes, you've got asthma. Here's your bronchodilator, go away.

Most people are not going to get diagnosed with work-related asthma unless they go to somebody that understands work-related asthma. And what I'm afraid of, I mean, how will the depart -- how would the agency deal with this?

Somebody has a diagnosis of asthma. They believe it's related to work, but all they've got is their doctor's statement that says you've got asthma.

They then have to go to a specialist or get referred to a specialist. Which may or

may not be paid for.

So that's -- I'm trying to figure out from this very good established criteria, how practically that's going to get executed. Not that we shouldn't do this.

But, you've got to get to the next point.

CHAIR MARKOWITZ: Yes. The physician has to confirm that the symptoms are work-related. And that physician can be the primary care provider. It can be the pulmonary specialist or any treating or evaluating physician.

And absent that it would be the CMC. And I don't really see any alternatives, any other choices.

It would be a little challenging for the CMC to do that. Because they don't have direct communication with the patient.

And so if it's still an open question, they could involve a second COP or whatever it is, the second, you know, opinion evaluation.

But, there are only so many choices here.

Ms. Vlieger?

MEMBER VLIEGER: In saying that it needs to be work-related. In some cases there's actually a traumatic chemical exposure that you can cite.

For many of the workers, it's an accumulation of long term, low dose. Or a combination of chemicals that you -- they don't even know what it was.

So, when you say work-relatedness, that's really relying on the worker realizing what's happening. And knowing, you know, that it was work-related.

So, what I find an issue within the Department is that the veracity of the claimant's report of work-relatedness when they really don't know what they were exposed to comes up quite a bit.

CHAIR MARKOWITZ: Well, this recommendation doesn't require identification of any specific trigger or any specific set of

dusts, vapors, gases, or whatever in order for it to be work-related asthma.

It's that the symptoms have to be identified. Symptoms or medication usage. Or the objective testing have to be identified as being work-related.

MEMBER VLIEGER: So is it more of a temporal relationship to the disease then?

CHAIR MARKOWITZ: Correct.

MEMBER VLIEGER: Okay.

CHAIR MARKOWITZ: And even that can be challenging. I understand. But, there's going to be something.

MEMBER VLIEGER: Right.

CHAIR MARKOWITZ: All right. Dr. Friedman-Jimenez?

MEMBER FRIEDMAN-JIMENEZ: Since the definition relies fairly heavily on symptoms, I think when you mentioned symptoms in the definition, you should include the four classic symptoms that are described for asthma, wheezing, which is not actually really a symptom. It's

often not perceived by the person. It's heard by the doctor in the stethoscope.

But I would include it. Cough, shortness of breath, and chest tightness are the four symptoms that are typically associated with asthma.

And each person has their different symptoms that they perceive when they have an asthma attack. And I would either include all four, or not include any -- not mention them by specifically.

Because if you just limit it to wheezing or shortness of breath, many people don't know that they're wheezing, and their doctor tells them they're wheezing because they hear it in the stethoscope.

And many people don't experience shortness of breath even though they have significant bronchial objection. So, I would either take out the specific symptoms, or list all four.

CHAIR MARKOWITZ: Well, I would

actually favor taking out the symptoms. Because if it -- if we include cough, which can be a manifestation of asthma, but can also be an irritant, bronchitis without real bronco spasm, then it opens the door.

So, I would favor just eliminating wheezing or shortness of breath for the line four here. Dr. Redlich?

MEMBER REDLICH: Yes. From reviewing a lot of work-related asthma claims in various settings over many years, physicians unfortunately when you review their notes, rarely got -- their visit is usually focused on the patient's current symptoms. And managing those symptoms.

And so in the most clear cut cases, you can -- there can be remarkably little. But I think there are other things that can be.

And one doesn't want to accept, you know, asthma is a common condition in every single case. But the type of things, and this is what could be included in guidance is, you know,

in the period of time, was there a much greater frequency of visits for asthma treatment?

So if you go to a job with a lot of irritants or agents that could cause or exacerbate asthma, and over that three-year period of time, were you seeing a doctor for asthma weekly? Instead of prior it had been only once every two years. So, things like that.

Frequency of the medication usage, the visits to physicians can be very helpful. And relationship of that to the period of time that -- of work time that's in question. And that's something that one can get from medical records.

But those are the types of guidelines that could be included. You know, A, B, or C in terms of showing this association with work.

CHAIR MARKOWITZ: Dr. Friedman-Jimenez?

MEMBER FRIEDMAN-JIMENEZ: One different issue is the diagnosis of work-exacerbated asthma. This is a relatively recently described and accepted entity.

And most doctors, I think, are not aware of this, the existence of work-exacerbated asthma. And they think of -- you know, if they know about occupational medicine at all, they'll think of occupational asthma in the classic sensitizer-induced situation.

So I think the document should emphasize a little bit more the work-exacerbated asthma. It's actually more common than occupational asthma.

And it maybe in many cases, as disabling as occupational asthma. And it's an important disease.

And I think that this document should really put it on the map of the CMCs and the treating physicians, anyone that consults the document. And patients aren't likely to think of it either. Because they probably have never heard of it either.

So, I think work-exacerbated asthma should be highlighted a little bit more in your recommendations.

CHAIR MARKOWITZ: So, it's, you know, -- so, you know, I can do that in the rationale. But I point out in the recommendation the last three lines.

Which is that the recognition of both forms of work-related asthma should be communicated to claimants, physicians, and consulting IHs and CMCs.

Dr. Boden?

MEMBER BODEN: I have a question. Which just raises, but just slightly off topic. So, pull me in if I'm --

CHAIR MARKOWITZ: I will.

MEMBER BODEN: If I'm out of line on this. So, my question is, for cases where a presumption would apply, we already have presumptions in the program, is -- are claimants and physicians provided with a link to the presumption in the process of going -- by this CEs?

So in other words I'm saying, is there some way of communicating to people who might

otherwise not know that the physician should have this presumption in mind when writing a letter to the -- to the program?

CHAIR MARKOWITZ: Ms. Leiton, do you want to address that?

MS. LEITON: Yes. When we have really specific criteria such as this, and I think this recommendation actually specifically says that we'd have to do some education, something -- language along those lines.

But, we would be -- even without a letter to the doctor, we would have to say, this is what we consider to be work-related asthma. You know, please provide us with X, Y, and Z information.

So, that would be in the case of a treating physician or a physician that the claimant has already gone to. We would have to tailor it about the letter to include the language that said that.

And we do do that in certain circumstances. If it were a CMC obviously we

would have to include that in our CMC training package or whatever, so.

CHAIR MARKOWITZ: Okay. Dr. Redlich?

MEMBER REDLICH: I agree with the importance of work-exacerbated asthma. I would just say that -- and the great majority of patients that I clinically see are referred to me for work-related asthma. That's the entire bulk of my clinical practice.

In the textbooks there's a very clear delineation of new onset occupational asthma, work-exacerbated asthma. In actual practice, it can be very difficult to tell what is exacerbation of pre-existing.

So, I think the term work-related asthma is a very good term. Because for this situation, and really for all of the now in the United States compensation systems, the question is, is the asthma either caused or exacerbated by work or work factors contributing?

And so this differentiation, because in reality is, did the person have very mild,

minimal pre-existing asthma that then got worse? Or was this really new asthma?

And that is very challenging. And the other factor is, anybody who has asthma, it's a chronic condition, by the time they're seeing a physician, they could already have had symptoms for several years.

And whatever the original cause of asthma, even if it was to a very specific agent, becomes more defuse over time. And the triggers become more defuse over time.

And so I just mention that. I think in the terminology it would really be better and easier to explain to the, you know, physicians doing this work if one just used the term work-related asthma. And that included work exacerbation.

The other point that I think is important to realize that every published study on work-related asthma in the United States, when you look -- and these are, you know, some of these are publications where pretty extensive

evaluations have been done, you know, by occupational lung specialists.

The causative agents that have been found in those, you know, series and studies have almost, you know, over 50 or 80 percent of them are non-specific agents. Not one single substance.

So, the literature talks about, you know, a lot of very specific, there are over four hundred different chemicals or things that can cause asthma. In practice, what tends to be identified, you know, is dust irritants, cleaning products, and those sorts of exposures.

And then I think the other important sort of factors that do substantially exacerbate asthma and would be relevant at at least of the sites that we've seen are extremes of temperature and extremes of humidity can really seriously exacerbate people's asthma. And limit their ability to work in that environment.

I mean, we were told yester -- two days ago that it could either be one hundred

degrees at that site, or you know, below -- you know, very cold.

So, I just mention that because I think the discussion should include not just inhalational exposures. But, factors that physical as well.

CHAIR MARKOWITZ: Thank you. Yes, I think actually in this room they're trying to recreate some of the experience of working at Hanford.

(Laughter.)

CHAIR MARKOWITZ: The alternating trips to the Arctic and Aruba, in this room here.

(Laughter.)

MEMBER REDLICH: No, no. And you know, that is important. And it's also an area where a small modification could keep that person at work too.

CHAIR MARKOWITZ: Ms. Vlieger?

MEMBER VLIEGER: Slightly off topic. But I don't know if we're going to address it.

But the wording in bulletin 16-01

right now specifically in paragraph 2B that instructs that the position of specific information on the mechanism for causing, contributing, or aggravating the condition, the strongest justification for acceptance in this type of claim is the treating physician can identify the specific asthmatic incidents that occurred while working at a covered work site, and the likely trigger.

So --

CHAIR MARKOWITZ Right. Well, so let me just point on this reg -- the third part of the recommendation. At the bottom it says a specific triggered event causing work-related asthma may occur but is not typical or necessary.

And it also says in citing exposures should be identified when possible, but not required. It tries to address the --

MEMBER VLIEGER: So, are we going to recommend that this bulletin be rescinded? Are we moving towards that later in the -- in a later discussion?

CHAIR MARKOWITZ: Well this -- there's a draft document that redoes the whole asthma policy. Where the -- but this recommendation we're trying to --

MEMBER CASSANO: Affect.

CHAIR MARKOWITZ: Affect. Thank you, affect. Thank you. Right. We're trying to inject some thinking that would affect what the revised draft document would look like -- looks like.

MEMBER CASSANO: So, getting back to what they said, I don't think you want to put -- I'm sorry. I don't think you want to have a document out there that contradicts what you're trying to do here.

So something about modifying 16-02 or 16-01 -- 16-01 to include this information or to remove the more stringent information needs to be said. Otherwise you're going to have contradictory documents out there, I think.

CHAIR MARKOWITZ: Yes. I don't -- to me if this recommendation is accepted, it

necessarily drastically revises 16-02. And drastically revises the draft presumptions that DOL is looking at.

So, to me it would be a formality to say that it should -- that they should rescind that specific guidance. Because if they accept this recommendation, they have to alter very substantially that bulletin.

MEMBER VLIEGER: This is Faye. Rachel, would that normally fall in once -- if we recommend this and they're accepted into that draft procedure manual that we've got?

MS. LEITON: Yes. And any changes that we would -- if there are recommendations that change any of the presumptions, anything that's out there that says something else, is going to have to ultimately be changed.

I mean, this -- especially right now given that we're going to have a change to the way we do our procedure manual, it will be a lot easier to just make the change in the procedure manual.

Any other documents obviously, like if we were to go forward with the exposure chapter, excepts of which you've received, then we're already -- that says until incorporated into the procedure manual.

So that's changing whatever's been out there. We would -- those circulars or bulletins that have that information would no longer be valid. Because we have the most recent guidance out there.

CHAIR MARKOWITZ: Okay. Thank you. So, if we could just stick with comments that aren't necessarily repetitive of previous comments, that would be great.

Dr. Silver? Whomever?

MEMBER FRIEDMAN-JIMENEZ: Work-aggravated -- work-related asthma I think is a great example of a disease that illustrates the worsening, contribution to, or cause concept that we're trying to promote with the CMCs.

And I think that all this -- in the CMC training it would be worthwhile including the

ATS statements on work-related asthma and work-exacerbated asthma.

And ask them to actually read them. I think they're quite illustrative of the concept that we're trying to promulgate.

CHAIR MARKOWITZ: Dr. Silver?

MEMBER SILVER: Asbestos fit neatly in columns and rows yesterday. But here we're talking about hundreds of different agents.

And I wonder if those ATS statements maybe say it better. But what I'm hearing is that the CMCs with their old school habits of the mind that we saw on our medical evidence subcommittee need an explicit statement that there's a high degree of inter-individual variability in response to workplace exposures, clinical presentation, time course, response to diagnostic tests, and treatments.

They can't use a cookie cutter approach. And the claims examiners need to take that to heart as well.

CHAIR MARKOWITZ: Sure. Dr. Redlich?

Okay. Any other -- Mr. Griffon, do you have any comments?

MEMBER GRIFFON: No. Not at this time. I do not.

CHAIR MARKOWITZ: Okay. So are we ready for a vote? Or are there other comments?

(No response.)

CHAIR MARKOWITZ: Should we read this again so we know what we're voting on? Okay.

Work-related asthma recommendation one, the Department of labor could use a generally accepted unifying term, work-related asthma, for claims evaluation and decision-making.

Work-related asthma includes A, occupational asthma, or new onset asthma that is initiated by an occupational agent. And B, work-exacerbated asthma. Which is established asthma that is worsened by workplace exposures.

The recognition of both forms of work-related asthma should be communicated to claimants, their physicians, and consulting

industrial hygienists and CMCs.

Two, medical criteria for the diagnosis of asthma. The diagnosis of asthma by a treating or evaluating physician should be sufficient for the recognition that the claimant has asthma.

Bronchodilator, reversibility of FEV1, and/or a positive methacholine challenge test maybe helpful, but should not be required to accept the diagnosis of asthma which is made by a healthcare provider.

Three, and I will read this, but I will also, in line four there's some language we might want to revise. But let me read it as it is. And then we can get to the revision.

Work-related asthma, whether occupational asthma or work-exacerbated asthma is defined as the presence of medically diagnosed asthma that is associated with worsening of any one or more of the following in relation to work. Asthma related symptoms, wheeze or shortness of breath, asthma medication usage temporally

related to work, or pulmonary function indices change in FEV1 or peak expiratory flow rate, bronchial hyper-responsiveness or a positive inhalation challenge test.

Such a history should be documented by a treating or evaluating healthcare provider, or addressed by a CMC if consulted in a claim evaluation.

The same criteria for work-related asthma should be used in evaluating asthma claims whether the claim is made contemporaneous with the period of DOE employment, or after the end of that period of employment.

A specific triggering event causing onset of work-related asthma may occur, but is not typical or necessary. In citing exposure such as dust, fumes, heat or cold, or others, should be specifically identified when possible, but should not be required for the diagnosis of work-related asthma.

So Kevin, if you could bring up the version we can modify. So the question on line

four on this is whether -- and when the symptoms are cited, there are only two symptoms cited, wheezing and shortness of breath.

And the idea came, we should have had cough and chest tightness. If you just throw that up. Yes. That's it.

So, I think we should just take out wheezing and shortness of breath. Okay. And then on -- so line four, Kevin, in the parenthesis, wheeze or shortness of breath. You can take out the whole thing.

And the other issue is what Dr. Redlich raised. Which is healthcare utilization as evidence of asthma.

And it says asthma medication usage. We could amend that to say asthma medication or healthcare-related -- or healthcare utilization temporarily related to work.

So, is that -- should we add that? If anybody's following what I'm saying.

PARTICIPANT: So it would be more specific in the health evaluation?

CHAIR MARKOWITZ: Or it would be asthma related.

MEMBER REDLICH: Well I think the recommendation for the, you know the rationale detail should be added to that.

CHAIR MARKOWITZ: Oh right, the other rationale or the guidelines. Okay. Okay. So we could -- you want -- so should we leave it as it is? Asthma medication usage? Or add the asthma related healthcare utilization?

MEMBER REDLICH: No. That's fine. That's fine. I can live with that. That's fine.

CHAIR MARKOWITZ: Okay.

MEMBER REDLICH: I'm just saying the specifics of that.

CHAIR MARKOWITZ: Okay. So before health, if you can put asthma related.

MEMBER REDLICH: But I would be interested in getting rid of the change in FEV1 peak flow. I think in hundreds of asthma patients where I have tried to document this, I have maybe in 25 years been able to document

physiologic changes, either peak flows or FEV1s in less than five patients in over 25 years.

And that's with very intensive trying.

CHAIR MARKOWITZ: So you want to take out change in FEV1 and PEFR and leave bronchial hyper-response to this?

MEMBER REDLICH: No. Take them all out.

CHAIR MARKOWITZ: You want to take out the pulmonary function indices entirely?

MEMBER REDLICH: Yes. Those are way too -- in that setting. It is appropriate if one wants to discuss just asthma generally doing spirometry.

But in terms of association with work, better at work/away from work, those really should go.

CHAIR MARKOWITZ: Okay.

MEMBER REDLICH: If you look at the literature, it's just not supported.

CHAIR MARKOWITZ: Is anybody disagree with what --

MEMBER CASSANO: I sort of disagree. Only because if you take that out, if somebody actually has that documentation, then it's not usable.

And as being a person that's in a clinic that's, you know, in an industrial setting, I have many times used cross shift of peak flows. And have been able to document it very well.

So, if it's here, I think you don't want to lose it.

MEMBER REDLICH: No, no. It's a good point. Because it -- including it one wants to encourage doing it. Because it's helpful to encourage.

So one wouldn't want to discourage someone from trying to better document. That's correct. It's just -- and that -- I -- if available, that's -- or --

CHAIR MARKOWITZ: Well maybe -- yes, Dr. Dement?

MEMBER DEMENT: Oh, I was just

pointing out, it's an or. It's not a requirement. And I think this just provides guidance.

So, I'm in favor of leaving it in.

CHAIR MARKOWITZ: Well --

MEMBER REDLICH: I thought as long as people recognize that. Because what tends to morph is once it's there, it tends to be expected.

And I don't want to start getting into, it's available, but once you actually have it, well, how much of an improvement is actually needed? Is it 20 percent? Is it 10 percent? Is it -- so it's --

MEMBER CASSANO: Maybe you can just modify that a little bit. That it says pulmonary function indices, you know, related to work may be helpful. But are not, you know, are not --

MEMBER REDLICH: Yes. And the positive inhalation challenge test that's not done anywhere in the United States. So I think that should be removed.

CHAIR MARKOWITZ: Okay. So let's take out positive inhalation challenge test.

MEMBER REDLICH: Yes. That should go.

CHAIR MARKOWITZ: And in the rationale --

MEMBER REDLICH: Yes.

CHAIR MARKOWITZ: In the rationale we can emphasize it.

MEMBER REDLICH: And a change in bronchial hyper-responsiveness --

MEMBER CASSANO: Yes.

MEMBER REDLICH: Should go. Because that means that you're doing --

MEMBER CASSANO: A challenge.

MEMBER REDLICH: A bronchodilator at work and away from work. And comparing the change in them.

CHAIR MARKOWITZ: Okay. So change in FEV1, then take out the or. So --

MEMBER CASSANO: No. Keep the PEFR. Because that's --

MEMBER REDLICH: Yes. The peak --

CHAIR MARKOWITZ: No, no. Let me finish. Change the FEV1, PEFR, or bronchial hyper-responsiveness.

MEMBER CASSANO: Take out the bronchial hyper-responsiveness

MEMBER REDLICH: No, bronchial hyper-responsiveness.

CHAIR MARKOWITZ: Take that out?

MEMBER CASSANO: Take that out.

MEMBER REDLICH: Yes. Because that --

CHAIR MARKOWITZ: Okay. Changing -- and I think that you want or PEFR.

MEMBER REDLICH: And in fact the current guidelines, the data, it's really for peak flows and not for FEV1. It's not actually -- so it would just be the peak flows is what the -- because to be able to show any change, you have to do repeated tests.

And you can do that with a peak flow meter, which is a portable device. You can't do that with spirometry. And also spirometry, you can only do let's say at work if they have it

onsite. And someone might improve the next day in the light, so.

CHAIR MARKOWITZ: Okay. That's good.

MEMBER REDLICH: The guidelines actually are peak flows.

CHAIR MARKOWITZ: Mr. Turner?

MEMBER TURNER: I was just wondering about wheezing and shortness of breath. Why would you take that out?

CHAIR MARKOWITZ: So, we'll put that in the rationale. But we didn't want it -- the problem is, if we put only two symptoms in, it ignores say, chest tightness.

So if we include -- if we list too many symptoms, then it can address conditions that aren't asthma. So, we're going to put that in the rationale.

But, the feeling is that we don't need to specify which particular symptoms represent asthma in this recommendation. If that makes sense.

MEMBER REDLICH: Just to simplify that

wording. I think the pulmonary function indices, I think if you simply said change in peak flows.

CHAIR MARKOWITZ: Okay. So you can take out pulmonary function indices.

MEMBER REDLICH: And just leave it as peak flows and get rid of FEV1 also. And that's actually consistent.

(Laughter.)

MEMBER REDLICH: Yes. Which is only one index. And that's peak flow.

CHAIR MARKOWITZ: Okay.

MEMBER REDLICH: Does that make sense?

CHAIR MARKOWITZ: That makes sense. Yes.

MEMBER CASSANO: So the change in peak flow only.

MEMBER REDLICH: Yes. That's correct. That's right. That's good. Thank you. Perfect.

CHAIR MARKOWITZ: Okay. Again, and once you -- okay. So just to -- if you back up a line, where it says asthma medication usage, or asthma related healthcare utilization.

Okay. So, any other -- any final comments on this? George or Dr. Friedman-Jimenez?

MEMBER FRIEDMAN-JIMENEZ: Yes. I agree with these changes. There -- in the literature several studies have tired -- many studies have tried to do peak flows on asthmatics.

And the best case scenarios with people who are continuing to work, have gotten maybe 10 or 20 percent of their group to do the peak flows successfully to two to four weeks.

So I think it's as Dr. Redlich was saying, it's doable in some cases, it's the minority of cases. And when it's present, it should be used.

But I think there should be a statement in the rationale saying that in the great majority of cases, it's not feasible. And it's not to be expected.

CHAIR MARKOWITZ: Right. Okay. That's fine. So is there a motion to approve

this? This recommendation that I've just read and we've modified?

MEMBER BODEN: Can I ask a question?

CHAIR MARKOWITZ: Sure, sure.

MEMBER BODEN: So, one other thing that I'm hearing, and I'm wondering if it should be explicit in the recommendation, or if I'm hearing it wrong, is that really IH input is irrelevant to the diagnosis.

Because we don't really need an exposure. We just need to have somebody have been at work.

And I'm wondering if -- I'm wondering a, if that's a misrepresentation. But b, if it isn't, whether it should be explicit in the recommendation?

CHAIR MARKOWITZ: Right. So the current policy, it excludes pretty much exposure of the little consultation with the SEM. Because it depends on the diagnosis of occupational asthma.

But I can certainly add that to the

rationale. Dr. Cassano?

MEMBER CASSANO: The only thing I see missing is, is it possible that somebody could misconstrue this to that one episode of bronchospasm that occurred at work for an unknown reason would be considered -- doesn't it have to be somewhat chronic? Or recurrent episodes?

CHAIR MARKOWITZ: No. That would be implied in the diagnosis of asthma.

MEMBER CASSANO: Okay.

CHAIR MARKOWITZ: I mean of -- all right. Yes. So, are we ready to vote? So all those in favor of this recommendation, raise your hand.

(Show of hands.)

CHAIR MARKOWITZ: Mr. Griffon?

MEMBER GRIFFON: Yes.

CHAIR MARKOWITZ: Okay. So 14 votes in favor. And there's all 14 of the board members who are participating in this meeting.

We're going to revive Dr. Sokas' recommendation that she sent after the discussion

yesterday from the Industrial Hygiene and CMC subcommittee. If you could blow this up.

And so we're going to do this. And then we're going to take a break and then we'll move onto the Part B Lung Disease Subcommittee.

This is a recommendation that she sent. And I edited the language a little bit. Because that's what I do.

Assessment of quality, objectivity, and consistency of CMC work. We request that the DOL provide the board with resources to conduct a quality assessment of a sample of 50 CMC evaluations that have been associated with claim denials.

The quality review will assess the nature of the medication information reviewed by the CMC, the use of standards of causation, the reasoning of the CMC, the scientific basis for the CMC conclusions, among other items.

The assessment will likely require contracted services of worker centered occupational physicians who are not associated

with the current CMC contract. The review may lead to recommendations including development of guidance materials.

So, it's open for discussion. Dr. Welch?

MEMBER WELCH: I think it's great. Let's vote.

(Laughter.)

CHAIR MARKOWITZ: All right. Other comments?

(No response.)

CHAIR MARKOWITZ: Okay. So, is there a motion to accept the -- and there's a second. Okay. Any final discussion?

All those in favor raise your hand.

(Show of hands.)

CHAIR MARKOWITZ: And Mr. Griffon?

MEMBER GRIFFON: Yes.

CHAIR MARKOWITZ: So 14 members of the board who are present all vote in favor. Let's start with the Part B Lung Conditions report from Dr. Redlich.

MEMBER REDLICH: Oh, let me get the -- yes, I'd like to give the -- sorry, I had my PowerPoint program kept crashing last night. Yes. So let me -- the email's not working.

CHAIR MARKOWITZ: Yes. While we're waiting, what we had planned to do if there's time after this report is consider a solvency in hearing loss presumption. And then handle associated items including scheduling the next meeting, so.

Anybody experiences any cold induced asthma, there are some pulmonologists in the room.

(Laughter.)

CHAIR MARKOWITZ: And Ms. Vlieger has an inhaler also.

Well, let me say that this is a -- the Joint Outreach Task Group for Energy Employees Occupational Illness Compensation Program is holding two town hall meetings today, one at two p.m. and one at six p.m. at the Red Lion Hotel in Pasco. Is that where we are?

PARTICIPANT: No. We're at Richland.

CHAIR MARKOWITZ: Okay. Okay. And these are the JOTG meetings. And representatives from the Department of Labor EEOICPA Program, the ombudsman office of the Department of Labor, the NIOSH of the Health and Human Services, the ombudsman to NIOSH, and the Department of Energy will be in attendance to answer questions and provide information on Part B and Part E parts of EEOICPA.

Representatives from the Former Worker Medical Screening Program will provide information on the free medical screening programs.

Representatives from the Hanford Resource Center and the Cleveland District Office will also be in attendance to receive new claims and answer claim specific questions. If you have any questions regarding this meeting, you can speak with Mr. Nelson or Mr. Levin in back. Or call their toll free number.

But for those of you on the phone

actually, let me give you that toll free number. It's 877-662-8363. That's 877-662-8363.

Attendance at the meeting is strictly voluntary. And registration is not required.

So we could take our -- we're due for a break in seven minutes. So if you want, we can take the break now and come back. It's up to you.

MEMBER REDLICH: Yes. Maybe we should just take the break.

CHAIR MARKOWITZ: Yes. Let's take a break for ten minutes. We'll be back a little bit before 25 of 10:00. Thank you.

(Whereupon, the above-entitled matter went off the record at 9:24 a.m. and resumed at 9:35 a.m.)

CHAIR MARKOWITZ: We're going to get started again. I want to point out the -- it's the professors on the board who don't appear to be back at school -- back in class on time.

SPEAKER: How long do we have to wait for them?

CHAIR MARKOWITZ: Well, I'd say two minutes. Some of the professors have made it back, but, notably, the people who are really the only people absent.

MEMBER VLIEGER: The workers are here.

CHAIR MARKOWITZ: Exactly. One Board member is arriving on his bicycle. So, that's good. He's a preventative medicine physician. He has his helmet. His helmet is, however, draped on his bicycle, not on his head.

Okay. We're going to -- we're only -- Mr. Griffon, are you there? Mark? Okay. Let's get started.

MEMBER GRIFFON: Yeah. Sorry, Steve.

CHAIR MARKOKWITZ: All right.

MEMBER GRIFFON: I am on.

CHAIR MARKOWITZ: Okay. So, Dr. Redlich, all yours.

MEMBER REDLICH: Okay. And it's -- it's 9:30 and just to keep an eye on the time, we need to be finished -- when should I be finished? I am --

CHAIR MARKOWITZ: Just proceed through your portion.

MEMBER REDLICH: Okay. So, I'm going to give an update on the Part B Subcommittee. We actually did do quite a bit since our last meeting.

So, I was going to go over -- we reviewed approximately 60 Part B cases. I was going to give a summary of what we learned.

Also, the sarcoid presumption, clarification of beryllium exposure, and then I was going to mention a few of the -- responses to a few of the issues and questions that the DOL and also others have raised concerning various parts of Part B.

So, and, actually, I did want to thank the other members of this committee, John Dement, Kirk Domina, James Turner and Laura Welsh. And Faye is -- Vlieger is not an official member, but she has been very helpful. So, thank you.

So, the cases that we reviewed included beryllium sensitivity, CBD, sarcoidosis.

As you can see, chronic silicosis, pneumoconiosis.

The numbers, there was a little bit of overlap between some of the cases, so -- as one or two fell under more than one category, but we don't need to worry about that.

So, I -- and I should say that the materials that we received, we did not get a thousand pages on each case.

We got some of the key documents, accepted facts, the CMC referrals. And as I -- since we did not have medical records, there could have been issues that we are unaware of, but this was based on sort of the -- those pieces from the case.

And not all of them had all that so that something like IH reports was only on a few of them. The questionnaires was on most, but not all of them as far as the -- as I said, there were different pieces, but what we had very little was the actual medical records. But now that I've heard about all the thousands of pages,

I am glad that we did not get those.

So, I think we actually felt like what we saw, we did have a better feel for what was happening with these claims.

I would say that there was -- we agreed with a number of the decisions, but areas that we found that there were some problematic decisions predominantly related to sarcoidosis and CBD claims.

And most of them actually fell into the group of either a misapplication or a misunderstanding of the sarcoid presumption.

I should say that almost all of the claims that we reviewed were ones that had -- in the final decision, had been in the last few years.

These were not really ancient, historic claims. So, these were in the last two to three years. So, that was one group.

And then there were some where I think the CMC based on the information we had, we felt had made a somewhat narrow interpretation of the

clinical information. There were few of those.

A couple -- and we wanted to raise this -- brought up the question of what is a -- the definition of a beryllium worker. Because there were, for example, someone who worked for many years at what we thought was a clear beryllium site, but the list then sort of concluded that they had no beryllium exposure. And that was not -- that was one or two.

And then, also, another finding that was evident from several of the cases, was eventually there was a correct decision, but the number of years and the number of re-decisions and -- it was just a lot. And I think, ideally, those could have been diagnosed sooner.

And I think that is an issue in terms of all the time, manpower and the stress that someone goes through for many, many years advocating a claim.

So, and then the pneumoconiosis and chronic silicosis we did not review as many. A number of them, there were issues which -- that

are beyond us related to the uranium workers, RECA and what -- the different criteria.

And the other problem that we identified has already -- has been addressed by the SEM Committee, which was that some of them identified a very limited group of exposures. I think that issue has been addressed by the SEM committee.

And then other issues that were -- we noticed, one was that -- so, the ones that we had, half of them had -- 30 of about the 60 had a CMC report in them. Of those, 30, over half of them, were a single CMC.

And he was a pulmonary physician with appropriate credentials, but I -- this was not just me. I think there was a clear attitude problem that this person had.

And I think to use one CMC for so many cases -- he was more on the East Coast, also. Not that there weren't, but there were a lot of West Coast cases, who -- I think that was -- that raises the issue for the CMC Committee or one of

the other committees, but I do think oversight of the people doing this. And this was quite noticeable.

So, and then the other issue that came up on a number of cases, and I don't know if this is something that can be addressed, is that sometimes they were asked a quite narrow question.

And I can understand doing that, but there -- for example, there might be a worker who was asked a question about silicosis and it was clear bilateral pleural plaques and asbestos disease on the chest x-ray, but the person wasn't asked that question.

So, I mentioned this. If the report had a, you know, have you identified another occupation -- or another possible occupational lung disease, at least for the -- if it was a user-friendly system for the workers, that would at least be an opportunity to then, okay, we'll look into the asbestos or the COPD or another disease.

So, I think that would be something that would be helpful. Then, obviously, people would have to be instructed.

So, does anyone have any questions about the review of the cases or anyone else on our group who wanted to comment, Kirk and Laura, everyone else who reviewed them?

MEMBER WELCH: Since I haven't seen how you finished the slides, are you going to make a specific recommendation about what you just said adding a -- adding that the CMC asks -- I mean, that the claims examiner ask the CMC a broader question about occupational lung disease?

MEMBER REDLICH: I hadn't, but I think that is a good suggestion.

MEMBER WELCH: Okay.

MEMBER REDLICH: And maybe we could --

MEMBER BODEN: Just a brief thought of that attitude. In other areas, particularly in areas involving some sort of adjudication, there have been studies that essentially measure attitude. They measure liberalness or

strictness.

So, if we're thinking about evaluating CMCs, which we talked about before, then you could actually -- you have to check a little bit on the details of how the CMC cases are allocated, but you could actually look for outliers scientifically.

CHAIR MARKOWITZ: Sure. Dr. Cassano.

MEMBER CASSANO: What you're asking, obviously, is sort of contingent on some of the other recommendations that we've made.

Obviously, if they only ask the question about silicosis and the SOAF didn't mention anything else and they didn't get the medical records which showed the chest x-ray that had the bilateral pleural plaques, there's no way for them to comment on other occupational disease. So, what you're asking has got to be contingent upon them seeing the entire record.

And I think we'd want to clarify -- I think that the -- currently, the process -- the procedure is the CMC only asks -- answers

questions that are asked.

So, seeing the rest of the medical records and knowing that there's an asbestos-related disease if this claims examiner hadn't asked about it, the CMC is not supposed to comment on it.

So, that's something that would need to be explicitly recommended to change, that the CMC should, you know, doing the medical records, note other potential occupational diseases and send it back.

I mean, you know, the claim comes in and the worker may have written down silicosis, when what they had was asbestosis. And it seems to follow that way and nobody stops and says, oh, this is really asbestos-related.

And it seems like a simple fix, but I think we have to understand -- and that's kind of your --

(Simultaneous speaking.)

MEMBER WELCH: Yeah. I think it is the --

MEMBER CASSANO: Yeah. And I think it also applies not just to I get Part 2 cases.

MEMBER WELCH: Yes.

MEMBER CASSANO: It applies to everything, you know. If somebody -- we see this all the time. Somebody has a particular contingent, it's this disease, this exposure, and it's a different exposure that actually is causing the disease.

There needs to be a process by which the CMC can render an opinion on that. And without the entire record and without the guidance to do that, they're not going to be able to.

MEMBER REDLICH: Yes. And so, I think that falls under your jurisdiction. Exactly. So, I will -- I just wanted -- this is sort of what we -- I will also say that because we were limited in what we were given, cases that seemed like a reasonable denial of, let's say, CBD, it's possible that there was evidence of lung disease somewhere in the chart that, you know, we didn't

see.

So, this was based on the records we had, but I still think that these -- and as I said, I think that most of these are fixable problems.

Okay. So, moving on, the next item was a sarcoid presumption and we had discussed this before.

And there is already a presumption of chronic beryllium disease in situations with a diagnosis of sarcoidosis involving the lungs in an individual who meets the definition of a covered beryllium employee.

So, I think last time we decided we don't necessarily need to make a recommendation that already exists, but the issue was more the implementation of that recommendation.

So, I did bring up -- and in the next few slides I wanted to not spend too much time on this, but I think reviewing the records that we did made it clear what some of the problems with this implementation were and also some of the

problems with the wording.

So, I didn't know whether there was a value in us voting again on sarcoid -- not voting again, but voting on this or not. And I'll defer to you.

CHAIR MARKOWITZ: All right. So, for the sake of clarity, we did not vote on a recommendation previously.

MEMBER REDLICH: Exactly. Yes.

CHAIR MARKOWITZ: So, this would be a new recommendation. But what we're looking at, is there additional text with this recommendation, or is it just what we're looking at right now?

MEMBER REDLICH: So, since the recommendation is already there, there's not additional text to the recommendation.

CHAIR MARKOWITZ: Oh, okay. So, what we're looking at now, those four lines, does this involve -- is this recommending a change in the policy of DOL, or is this just confirming --

MEMBER REDLICH: It's not.

CHAIR MARKOWITZ: It's confirming. So, if it's not a change in their policy, I don't see the need for a recommendation to confirm what they're doing.

MEMBER REDLICH: Yes. So, where there could be a potential recommendation, although I did not write it out, was to clarify the wording of the implementation of it.

But I think that that needing clarification actually is relevant to a number of parts of the whole Chapter 2 that relates to the B conditions.

I was just going to show one or two examples of some of the wording issues.

CHAIR MARKOWITZ: Sure.

MEMBER REDLICH: So, we're in agreement that because there is a presumption, we don't need to vote on it again. I just -- my memory from the last time was a little -- okay.

So, we're already on to the last item here, the responses to some of the questions. So, we had originally been given a number of

questions and have a more detailed response that I had planned to have it on the website before our meeting, but we'll get to people.

I wanted to highlight one or two of the key issues that have come up more than once and what our decision regarding these are.

So, not necessarily in the exact order, one of the questions was, what is a chronic respiratory disorder?

And so we don't need to read every line of this, but there are currently several definitions in these documents that refer to, you know, define what a chronic respiratory disorder is.

So, and this is from the -- what's it called -- the Chapter 2 in the procedure manual. Thank you. So, this is in Chapter 2 of the procedure manual for a chronic respiratory disorder.

This is also in Chapter 2 of the same procedure manual and -- let's see if this pointer -- oh, there it is. Okay.

So, it starts, you know, the last list had specific conditions of a chronic respiratory disorder. Some of them, you know, respiratory infections -- it's a broad list.

So, this one had some wording: pulmonary testing performed are not appropriate to document unless interpreted as such by a physician.

So, any PFT report does get an interpretation. So, I think it's just an example where the wording, to me, at least, is somewhat confusing as far as what a chronic respiratory disorder is.

And then this is from the slides that I believe are used to train; is that correct? They were under your category, but I found them.

(Laughter.)

MEMBER REDLICH: So, I spent a lot of time on that website, but -- okay. This then says -- it lists the pre-1993 criteria, which I think all of these, I think -- we were asked for clarification on a number of these criteria,

which we have tried to do.

But two things here: One is that at least one of the documents must show that the claimant received treatment for -- received treatment. And previously there's wording that says -- I don't have the exact words, it's in one of these, but it was either treated for or diagnosed.

So, treated for or diagnosed is actually different than treated. And it may seem like a minor change, but this is the type of thing that I think creates a lot of confusion and anxiety.

Another thing I will just mention, which I think -- is that it says here immunologic tests. And the first test it mentions is a skin patch test.

And one of the comments -- I went through all of the comments we've gotten since we started this from various other places to make sure we address the different ones, but one of them mentioned a patient calling around, spending

time trying to find where they can get their skin patch test done.

So, this is an easy fix. It should be out, you know, find, delete any mention -- skin patch testing is not indicated.

So, some of the rationale for these points is in our more detailed response, but that -- it would help to remove a reference to skin patch testing throughout.

So, I mean, this is just an example of one area where there is confusion in the -- some of the different versions of the wording.

And I apologize. My PowerPoint was crashing multiple times last night.

I did have a slide that showed what we thought would be reasonable wording for what constituted a chronic respiratory condition, which was basically symptoms with -- chronic symptoms with one other objective piece of evidence for a chronic respiratory condition. And so, that could be specified.

I felt like to start getting into the

-- each one of these points as a recommendation was probably sort of nitpicking.

I think the more general recommendation to sort of review the wording for consistency and -- that would make more sense than sort of each specific point.

But one of the areas that does need to be addressed for consistency is, what is a chronic respiratory condition.

So, then, the area of sarcoidosis presumption where, as I said, that there is a presumption, but the wording seems to vary.

Let me see, one of these -- this was the original sarcoidosis presumption in 2008. And it says: Presumption of chronic in situations with a diagnosis of sarcoid and a history of beryllium exposure.

The purpose, a diagnosis of sarcoidosis is not medically appropriate if there is a documented history of beryllium exposure, period. So, that is a sarcoid presumption.

And if that -- you believe in that

presumption, then we don't need many, many pages after that of what to do with this BeLPT or all these other possibilities. So, this presumption was the original presumption.

Then there was another circular after this that said that this circular was then, whatever, receded. And now that -- the current version of this is the wording that is in Chapter 2.

And there were some other pieces of this wording I don't, you know, it goes on to say here: Because a diagnosis of sarcoid for a covered beryllium employee is not medically appropriate, in any instance where this occurs, CBD is to be the presumed diagnosis.

And then when we start getting into all the howevers, things get sort of more confusing. And so, I think with a lot of the cases that we reviewed, it's understandable why there was confusion about presumption.

And I guess before we go on to Chapter 2, I think Dr. Markowitz discussed the basic

principle of a presumption yesterday. And that any presumption, I mean, there are a lot of advantages, as he mentioned, to a presumption. But when you do have a presumption, there is the potential that one would be either over or undercompensated.

So, this is the current wording. And so, it's -- it recognizes that a diagnosis of sarcoidosis especially in cases with a pre-diagnosis date, could represent a misdiagnosis.

Now, I don't know why it would be especially in these cases. It seems that either pre- or post-1993, if you have a presumption -- so that is confusing.

So, then -- so, and I'm also -- the differentiation between Part E and Part B gets confusing, because -- and I didn't want to go into a whole discussion here of, you know, are they the same disease or are they different? I know that has generated some confusion.

I think the point is that pathologically and clinically they can be

indistinguishable. And although certain features may be more common in one than another, such as extrapulmonary involvement, they can exist in both. And I think if there's going to be a presumption, then they should have a presumption.

So, and then also it continues with Chapter 2 for Part E claim, the CE can evaluate a claim as CBD. However, a positive is necessary to accept it.

So, this is under the discussion of a presumption. So, if it's a presumption, then I don't know why we have to have a, however, you need a positive BeLPT.

The other thing is this, too, wording is also like a little bit confusing. This is the actual name of the test that's currently performed, a BeLPT.

So, then, without affirmative evidence of a positive, the CE is to proceed with the adjudication of the claim as one for a diagnosis of sarcoidosis.

So, I mean, if you're confused with

the wording here, I'm confused and I'm -- this is my area of expertise. So, I think you've got the idea and we don't need to -- so, there's internal inconsistencies.

And then this is all -- this was actually then describing CBD on or after 1993. And it's relevant to the sarcoid presumption, because, in claims that contain a normal or borderline, and the biopsy confirms the presence of granulomas consistent with CBD, the CE may accept the claim. The lung biopsy is considered the gold standard, period. But then we have the however. So, it's very confusing.

And the current document does explain why you can have a negative BeLPT test and still have CBD. For instance if you were on steroids.

So, if it is a presumption, then do we need to have exhaustive efforts, you know, to go find every LPT and -- so, if it's, you know, you wouldn't need those exhaustive efforts.

Then there's other -- just there's areas that I think create confusion and there was

a case -- one of them I reviewed was denied because of this. I don't know if it was eventually accepted, but this is on the post-1993.

And I should also just clarify when cases were denied, it's important that people recognize that the organ that you biopsy when you diagnose sarcoid, is usually the one that would be least risky to do. So, sometimes skin or nasal. Someone could have pulmonary involvement, but the actual tissue was obtained from the skin.

And there were some cases like that denied where -- without an appreciation that there was pulmonary involvement.

And if the physician was tuned in enough to actually highlight, yes -- and we mentioned that you can document pulmonary involvement in those situations by chest CT scans showing the findings that would be consistent or pulmonary function testing and that is commonly done.

But getting back to -- they discussed

that the mediastinal lymph node biopsy is consistent with CBD, may be used to establish. So, they say that it's okay to use a mediastinal lymph node biopsy.

Then it says that the lymph node biopsy is not the equivalent of a lung biopsy. So, a mediastinal lymph node is in your chest. It drains -- these lymph nodes in the chest drain the lung.

So, then it says it does not substitute for the assessment of a post-CBD claim. The evidence has to be interpreted as lung pathology. A mediastinal lymph node is not dispositive proof of CBD in the same way as a lung biopsy.

So, this is a lot of wording, as a pulmonary specialist, I don't really understand. I think if you have a -- if you have disease involving, you know, the chest and the lymph nodes in the chest, then that is consistent with CBD.

Laura.

MEMBER WELCH: I think some of the what looks like jumping through hoops, is because the legislation defines diagnostic criteria for CBD.

So, and it requires -- I don't actually have it up in front of me for Part B cases, requires certain steps that -- and I think it requires some evidence of sensitivity.

But you have to kind of compare this to that, because, you know, the first one you put up, however -- it said: However, Part B has specific legislative requirements, so, therefore, blah, blah, blah.

So, I think what it is, is it's, you know, the claims examiner can't just say the mediastinal lymph node biopsy is -- shows granulomas and that's good enough. They have to have a physician say that that's part of the lung, because the legislative language may say it has to be a lung biopsy.

So, it's sort of like -- I mean, I think we have to -- maybe it makes sense to --

MEMBER REDLICH: No, I do understand that factor, but I think that one could address this problem and also be very scientifically valid and provide guidelines so that each individual person didn't need to know the full literature on these issues.

And I think they've done that in some regards, and I think there has been attempts such as explaining why you could have a negative BeLPT, you know, document that the person's on steroids.

So, I think there's been an attempt to do that, it's just I think it could be done better and sort of simplified.

And I think it is a point that we obviously have to -- okay. So, I won't spend too much more time on this, but the skin patch testing is just -- I mentioned that already. This is pre- and includes -- and it includes skin patch test and beryllium blood tests. So, that should go.

And then there was a question about

the wording -- you know, with -- in a number of places there's wording that is characteristics or consistent with. And I actually didn't fully understand the question that the DOL was asking related to this.

I think it's just important to recognize that for CBD and sarcoid and for most pulmonary conditions, there are findings that you do see whether it's the, you know, chest CT scan, the PFTs or the chest x-ray, that are consistent with, but any given one of those is not unique or pathognomonic for the disease.

So, I think that that wording is -- I understand that people would like one to be able to say, well, that CT scan finding is it, you know, and is only in CBD and not -- but that actually is not the case.

So, if there are other concerns or questions about the wording that I didn't understand. And then just another area where I think wording is creating unnecessary confusion, this is under discussion of characteristics,

chest x-ray findings.

Under that, there's a discussion of caseating granulomas. You don't see a caseating granuloma on a chest x-ray, it's histologically what you would see on a biopsy. So, having this discussion under the x-ray findings is somewhat confusing.

And then it -- and it says, are sometimes considered characteristic, and then -- so, this, again, is an example of confusing wording.

And then calcification, there was, I think, one case that was denied because there was some calcification noted somewhere.

Now, so you can have calcifications with CBD, and this is documented in the literature. So, this is a wrong statement and just should be removed.

And, again, it's an area where -- I mean, this whole discussion is confusing and unnecessary and has nothing to do with a chest x-ray finding.

Sorry. I hit the wrong -- do you want to get back to just the next slide? Yeah. I'm not used to this little -- I think we're just about --

CHAIR MARKOWITZ: I think that was the last slide.

MEMBER REDLICH: Okay.

CHAIR MARKOWITZ: Granulomas.

MEMBER REDLICH: Yes. So, I'll just go back to one earlier here. I think -- yeah, the one topic that I did not have a slide for, but we discussed, was the question of indeterminate BeLPT. And Laura Welch helped with this.

It was mentioned -- so, as people know, a BeLPT can be abnormal or normal. Abnormal being considered positive. And the DOL uses a standard of one positive test.

The question has come up of what to do when sometimes you can get what's called an indeterminate -- I'm sorry? Borderline, excuse me. That's my fault. Borderline BeLPT. I will

correct that.

And for a borderline BeLPT, it was mentioned yesterday the Department of -- that the state of Washington considers three borderline BeLPTs to be the equivalent of a positive.

Given that our DOL standard for sensitivity is one positive BeLPT test, if one looks at the literature of the predictive value of borderline tests, two borderline BeLPT tests is -- gives a similar predictive value as a one positive test.

So, we felt that two borderline BeLPTs should be considered the equivalent of one positive or abnormal BeLPT.

I did not put that in a formal recommendation, but I think that that is appropriate.

And Laura can -- if you want to comment further ---

MEMBER WELCH: Well, I do think at some point it has to be a formal recommendation, because the board has to vote on it.

MEMBER REDLICH: Okay.

MEMBER WELCH: And we have to vote on specific language, but I leave that up to our chair to decide.

CHAIR MARKOWITZ: Sure. Well, you know, we can communicate this discussion to DOL, but -- and at the next meeting, to formulate a specific recommendation and have a complete rationale to go along with it.

MEMBER REDLICH: Well, you know, if we want, we can formulate a recommendation now. I wrote the rationale in our response to all the questions as a rationale, but --

CHAIR MARKOWITZ: We could also, by the way, have a telephonic -- I think telephonic meeting of the board in the interim between our face-to-face meetings if you want to consider a recommendation.

So, we could have one, you know, in six to eight weeks.

MEMBER REDLICH: Okay. You know, I didn't know if that fell to the level of needing

a specific recommendation. But if people think that that is --

CHAIR MARKOWITZ: Yeah. Well, Dr. Boden.

MEMBER BODEN: So, a question. What would a recommendation look like?

So, one thought of what a recommendation could look like is recommended rewording of a document, but we could also -- that is specific recommended rewording, but we could also simply recommend to DOL that it takes certain things into account when it rewords.

So, I'm wondering what people are thinking.

MEMBER REDLICH: It is true that this -- some of the other points I made were more, I think, you know, wording that needs to be clarified.

The -- currently, there is no -- no sort of decision about how to handle borderline BeLPTs.

And what, in practice, happens, is

that people that have borderline lungs, you know, go for more tests and need more testing.

MEMBER BODEN: Let me --

MEMBER REDLICH: And so, the only -- I think the only real -- people have decided that they are -- mean something and the only issue is whether it's three that are a positive or two.

And I think given that the standard for -- the DOL uses is one abnormal BeLPT, that the equivalent of that would be two borderline.

CHAIR MARKOWITZ: So, is the recommendation simply that two borderline BeLPTs be considered equivalent to a single positive BeLPT?

MEMBER REDLICH: Yes.

CHAIR MARKOWITZ: If that's the language, then without getting -- if it gets more complicated or, you know --

MEMBER REDLICH: No, it's not.

CHAIR MARKOWITZ: -- starts other issues, then I think --

(Simultaneous speaking.)

CHAIR MARKOWITZ: If that's the specific language, I think we can discuss it and vote on it.

So, Kevin, if you wouldn't mind just typing that out?

MEMBER REDLICH: Yeah. I --

CHAIR MARKOWITZ: Is there any further discussion we need to have on this?

MEMBER CASSANO: Given how complicated all of the language is in the procedure manual and the training documents and everything else, I think making one specific change added onto all of this is going to be even more confusing.

And I think without the rewrite -- the recommendation to rewrite Chapter 2 completely and including that might just add more confusion to something that's already confusing.

CHAIR MARKOWITZ: Ms. Vlieger.

MEMBER CASSANO: I don't know. My thoughts.

MEMBER VLIEGER: The recommendation to actually be put forward to the Department of

Labor as a bulletin to supplement whatever you guys end up with a draft PM that's on -- the procedure manual that's going on right now, I do think this is significant and it affects a number of workers.

So, to wait for the procedure manual rewrite, I think, is going to be too long.

CHAIR MARKOWITZ: Other comments?

Dr. Silver.

MEMBER SILVER: It's disheartening for someone who naively read the statute upon passage to see that what we thought was going to be a simple set of presumptions has been turned into another science project for physicians and claims examiners.

In each of our public comment periods, we've heard from one of the advocates, Stephanie Carroll, about the idea of established beryllium disease per the statute.

Was that framework at all helpful to you in analyzing where DOL has gone wrong with this part of their procedure manual?

MEMBER WELCH: Well, I actually think that we probably -- I think we should think about -- you've said a lot of things, but I don't think it's specific enough for DOL to know how to change the procedure manual.

So, I think those two -- there's two issues. There's the simple, straightforward one that we have that Kevin is typing out right now about handling borderline BeLPTs. So, we could address that.

And then the rest of it, I think we have to look at it in terms of legislative language.

Part E doesn't have any specific diagnostic criteria, but Part B does. And so, how you can take current knowledge about beryllium disease and sensitization and make it fit -- I think what we've seen is many attempts to kind of make it fit with the legislative language.

And it's been tweaked so many times it's -- there's not one instruction about what to

do.

So, I actually think it would probably be helpful if we made recommendations, what to change.

MEMBER REDLICH: Yeah. So, I didn't mean to overly confuse -- I partly want just an example of some of the language. I mean, I agree.

I think that the borderline test is a specific issue that should be fixed and really does not have to do with, like, the confusing wording in the text.

So, I would vote that we suggest we vote on that.

MEMBER CASSANO: Question: Is this for both beryllium sensitivity and beryllium disease as in both Part B and Part E as we may need to say that, but it's for both sensitivity and disease, as well as under both parts?

MEMBER REDLICH: I think throughout -- there is consistency throughout the -- all the documents that when they are referring to

sensitization, that it is one positive BeLPT.

So, if one says that two borderlines are the equivalent of one positive, that piece is consistent.

CHAIR MARKOWITZ: Dr. Friedman-Jimenez.

MEMBER FRIEDMAN-JIMENEZ: I don't know this literature, and I'm wondering if you could maybe give us some references of the test, because I'd like to know what the gold standards were and what the predictive values were.

MEMBER REDLICH: Yes. So, Laura Welch can describe, but there are a couple papers that looked at the predictive value of the borderline test.

And I don't know if we here want to get into how many positive --

MEMBER WELCH: Yeah. I mean, I could send you some of that. There's no -- there's sort of no gold standard, but you can look at the predictive value clinically and use that as the gold standard. And I'll send you those pages.

MEMBER REDLICH: And I think that so much of the convoluted language and the like, the one piece of the Act that if one could go back in time and change, was the -- such an emphasis on the BeLPT test, because the -- post-1993 it's almost -- it's sort of been a bottleneck.

And I put it in our longer response and rationale, but there's a number of reasons for why you could be sensitized and have CBD and have a negative BeLPT test that go beyond just being on steroids.

And it's shown that when you do, it's not a perfect test. And when you do lavage and peripheral blood, each of those can be falsely negative and falsely positive.

And, in fact, when you actually have active disease, the sensitized lymphocytes may go to the lung and cause one disease. And then when you measure peripheral blood, they're not in the peripheral blood, because they're in the lung. And so, you can have a -- definitely have CBD with a negative BeLPT.

Unfortunately, because of the wording of the Act, a lot of the convoluted wording in the various manual circulars, updated guides, you know, are trying to solve that problem.

But I think hopefully moving forward, there would be a way to do this that created less confusion.

CHAIR MARKOWITZ: Mr. Whitley.

MEMBER WHITLEY: At that last meeting, we had a lady that spoke that had eight uninterpreted --

MEMBER WELCH: Eight borderline.

MEMBER WHITLEY: No, she had eight uninterpreteds.

MEMBER WELCH: Okay. Uninterpreted is a different question.

MEMBER WHITLEY: Did we change anything on that?

MEMBER WELCH: It's a sort of technical thing. There probably are -- someone shouldn't be just repeatedly retesting if that's uninterpretable. There are ways to try to run

the test differently to get it to the interpretable.

Uninterpretable usually means the cells didn't grow or they overgrew or a bunch of things. It's not -- borderline, there's a sensitivity to beryllium, it's just not a high signal.

Uninterpretable is a problem with the test. So, I mean, it's -- we do it differently and we can -- sometimes there are people for whom you just can't get a BeLPT. But then at some point, you stop and why keep sending them.

If their serum and their cells always come up with an uninterpretable result, you have to accept that's how that person is and deal with it in that context.

So, it could be -- there's probably ways to find ways for a claim to be accepted for people who have an uninterpretable BeLPT as well and we can look at that specifically for people who you just can't get a real -- can't get a good result.

MEMBER REDLICH: I think it's also important to understand that the whole beryllium lymphocyte proliferation testing literature and the sort of guidelines were developed in the setting of where you're doing surveillance on healthy workers and you don't want to go crazy, deny someone a job, start doing a ton of invasive procedures when you have a positive test.

So, there's been concern about, you know, why do you want to have repeated tests, because you -- and that's doing a test with the purposes of surveillance of healthy workers.

The perspective where I see patients with beryllium disease are people who are diagnosed with sarcoidosis or interstitial lung disease and the -- and then what is the predictive value of a test and the utility of doing it in that situation?

And so, that is different in someone with, let's say, preexisting disease who has known beryllium exposure.

If you look at -- let's say

preexisting granuloma disease in their lung and known beryllium disease, the literature on all of the predictive values and the like have been done -- and the -- sort of the rationale for the whole test and how many repeats you need, was done thinking of what would be best in the surveillance of healthy workers, not -- now, that sort of literature and wording has been taken, you know, sort of more broadly and -- but in the setting of someone who has known granulomatous lung disease and a history of working with beryllium, the overwhelming likelihood, you know, which would be more likely just in terms of probabilistically sarcoid or CBD, sarcoid is a rare disease, you know, whether it's one in 10,000 or one in a thousand. Especially sarcoid that involves symptoms and lung disease.

So, is one in 10,000 -- how does that compare to the probability of having CBD if you've, you know, had beryllium exposure?

And that, you know, whether it's 0.1 percent or one percent or five percent, that is a

much higher probability than having sarcoidosis.

So, I think part of the confusion about the BeLPT is the setting that you're doing it for.

CHAIR MARKOWITZ: So, we have a recommendation and does the -- the recommendation language we look at now need to be modified in any sense? Does it need to be specified, as Dr. Cassano says, under Part B, subpart B and subpart E?

MEMBER CASSANO: I would -- I've seen how recommendations can get screwed up when they end up being promulgated. And I think the more explicit we are, the better.

CHAIR MARKOWITZ: So, after evaluations, add under subpart B and subpart E of EEOICPA.

Any other suggestions on the language?

Mr. Whitley.

MEMBER WHITLEY: You probably should change should to shall.

CHAIR MARKOWITZ: Change the should to

shall?

MEMBER WHITLEY: It means it will be.

CHAIR MARKOWITZ: Right. Think big or go home? Is that what you just said?

(Laughter.)

CHAIR MARKOWITZ: Okay. So, if there are any other final comments, we'll take a vote.

Mr. Griffon, by the way, do you have any comments you wanted to add?

Okay. Ms. Vlieger.

MEMBER VLIEGER: I'm not sure evaluations is correct. I think it would be claims adjudication.

CHAIR MARKOWITZ: Okay. Change evaluations to adjudication?

MEMBER VLIEGER: Yes.

CHAIR MARKOWITZ: Okay. Is there a motion to approve this recommendation? A second? Okay.

All those in favor, raise your hand.

(Show of hands.)

CHAIR MARKOWITZ: Anybody -- oh, Mr.

Griffon?

Well, while we're waiting for him, all those opposed? Any abstentions? One. So, of the committee members present, of whom I think we're 13, there are 12 in favor, one abstention and no no votes.

And, Mr. Griffon?

Well, if he comes back on the line, he can vote. But otherwise -- so, that's done and we're done, Dr. Redlich?

MEMBER REDLICH: Yes.

CHAIR MARKOWITZ: Okay.

MEMBER REDLICH: So, I guess the only thing --

MEMBER GRIFFON: You didn't hear me. I voted yes.

CHAIR MARKOWITZ: I'm sorry. I'm sorry. Mark?

MEMBER GRIFFON: Yes. You didn't hear me. I voted yes.

CHAIR MARKOWITZ: Okay. Thank you.

MEMBER GRIFFON: Okay.

MEMBER REDLICH: So, the only question I would raise is, what are the possibilities or options to revise the manual?

CHAIR MARKOWITZ: Well, I guess that's a question for Ms. Leiton.

MS. LEITON: So, the -- the recommendations from the Board are going to be considered in one of our procedures that we develop, you know, one way or another.

So, a lot of the recommendations you're making today with regard to presumptions if they were to be accepted, we're going to be making changes to the procedure manual.

If you have specific wording that you think should be considered in the procedure manual and it's presented to us as a recommendation, obviously it's something we would consider.

I'm not sure that answers the question, but --

CHAIR MARKOWITZ: That does, actually. That does. Thank you. Okay.

So, we're not going to be able to fully consider the final recommendation we wanted to look at, but I do think we should present it at least initially, because I would favor actually trying to have a telephone meeting of the Board before our next face-to-face meeting so that we can address this particular presumption and not wait the additional several months.

So, if you could bring up the -- which -- it says that there were solvents and hearing loss.

MEMBER REDLICH: So, while we're just bringing that up, if I understand if -- I have a version of B that has been edited.

Would that be helpful to give that to you?

MS. LEITON: When you say a version of --

MEMBER REDLICH: I'm sorry. I'm sorry. Of Chapter 2, the 1000.

MS. LEITON: I think the one thing to keep in mind is that -- I think a couple of

people have mentioned it, is that the statutory criteria are very specific.

So, as long as it's within the framework of what the statute says as pre-CBD, post-CBD, those, you know, within that framework -- obviously you can edit and submit whatever you want to, but that's what we would have to be considering first and foremost, is what is in our statutory language.

So, you know, the presumptions on sarcoidosis are really -- we're saying we'll consider sarcoidosis CBD under certain circumstances, and then it reiterates what the CBD criteria are and how they interpret the CBD criteria pre and post.

So, any language you would propose for that section, obviously, yeah, we'll consider, you know, what you propose to us.

I recognize that one has to --

MEMBER REDLICH: Because it's so specific that we don't want to have to go to Congress.

CHAIR MARKOWITZ: Okay. Thank you.

Dr. Welch.

MEMBER WELCH: Okay. So, we did discuss noise and hearing loss at one of our -- I mean, solvents and hearing loss at one of our previous meetings.

And I went through the literature in more detail, found some additional things that were very helpful, and put together something for us to think about for a presumption.

As you recall, there currently is a presumption for solvent-related hearing loss. And this is what I have here.

They have to have sensorineural hearing loss in both ears, they're exposed to one of the listed chemical solvents and worked in one of the listed labor categories for required concurrent and unbroken 10-year periods.

Now, I'm just trying to remember, and somebody else can help me out, there might have also be in that, a calendar year cutoff.

(Off the record comments.)

MEMBER WELCH: Ten years prior to 1990.

CHAIR MARKOWITZ: Ten consecutive years prior to 1990.

MEMBER WELCH: So, I'll be sure to add that back in.

And the solvents that were -- are listed -- and so, if these are reported as -- from the individual or, you know, their labor category has these exposures in the SEM, they can be considered.

And then they have to have that ten continuous years before 1990, but the specific solvents are established as the cause and accepted in the current presumption.

Here's the labor categories which you can see that are on the big screen, probably, but it's a, you know, it's a pretty good list of people who would have used organic solvents in their work.

As we know from many discussions, there will be people who work as an instrument

mechanic or instrument technician, but their job title may not be instrument mechanic or instrument technician.

So, there has been a problem with implementing this particular presumption in that people are doing equivalent work to one of these listed job categories, but there's no way to accept them if they're not in the job category.

So, in terms of what the literature shows, recent reviews conclude that both animal and human studies clearly establish effects of solvents on hearing.

The animal studies are specific solvents. There are animal studies that are multiple or mixed solvents so that what information we have on mixed solvent exposure comes from human studies.

But the solvents that were listed -- I have another slide that kind of shows the certainty of it.

There are consensus statements available from NIOSH and EPA that solvents cause

hearing loss -- that organic solvents cause hearing loss.

Because issues of dose-response or a threshold, meaning -- threshold meaning there's a level below which there's no injurious exposure, you can't really identify those in animal studies.

And the human studies are -- because the exposures are complicated and usually mixed, there's not a lot of data that helps us on dose-response, which is what we need to establish years.

So, there was a paper I hadn't read before, which is a systematic review that was done by NIOSH and the Nordic -- the Nordic Expert Group for Criteria Documentation of Health Risks from Chemicals.

And they -- and this was published in 2010. And there is some data, but not a lot since then. So, I think this is probably a really good evidence-based review to rely upon for this presumption.

So, styrene, toluene, xylene and carbon disulfide cause hearing loss at or below the current OELs. Which would then say immediately that any cutoff date such as 1990 where we presume exposures were higher prior to some period of time really can't apply. Because even if the exposures are controlled to the current OEL, there's a risk of solvent-induced hearing loss.

So, xylene and ethylbenzene, there's more limited occupational data, but this evidence-based review concluded that animal data shows effects at or below the current OEL. So, I would put those in the same category, styrene, toluene, xylene, carbon disulfide and ethylbenzene.

Then TCE and solvent mixtures, there's an effect in human studies. Not really enough data to say whether it's at or above what level below the -- above or below the current OELs.

The mixtures that were studied in the human studies most often were MEK, MIBK, xylene

and toluene, which are already on the list of solvents that have been identified and were accepted in the current presumption to cause hearing loss.

So, I think that list of solvents is pretty good and those are the ones for which there is evidence.

I think the question for that, and we'll talk about it when we talk about the specific presumption, is how do you establish those exposures.

Many people know they worked with solvents, but they may not know they were working with MIBK.

And so, then you're relying primarily on the SEM to identify those exposures and then we get back to some of the limitations with the SEM. It may be not a solvable problem, but -- so, we're really looking at these particular compounds. Carbon disulfide is not on the previous list and we're going to need to add that.

And then I want to include a recommendation that DOL develop some direct disease work links for the tasks with exposure to those solvents that are in the range of the OEL.

And there is -- that's something potentially the Board could help with or industrial hygiene could help with.

It would help get around the problem that the labor categories that are listed -- can't include all the jobs within the DOE complex that would have performed those tasks.

So, if we can identify the tasks and have a direct disease work link, I think that would really, really streamline processing these particular claims. So, that's one recommendation.

And then the larger one -- so, I'm recommending we keep the ten-year exposure requirement, but that it be cumulative and -- rather than continuous. And that if the -- let me just do the first one.

So, ten-year cumulative years in any

of the job titles on the list in the current presumption.

No requirement, then, that they had to also report exposure to those specific solvents or that the solvents be present in the SEM.

If they did those jobs, we know they're exposed to mixed solvents and many of the solvents on the list.

If they weren't in one of those job titles, then we're looking for reported exposure to styrene toluene, xylene, ethylbenzene, TCE or carbon disulfide on the OHQ, or evidence for exposure to those solves in the SEM for at least ten years cumulative.

And also, report exposure to solvent mixtures. As I said, that those -- the mixtures most commonly looked at in occupational studies include the specific solvents that are recommended in the paragraph above.

Or exposure for ten years cumulative established through work history and a direct disease work link process.

So, that would be that if someone's got ten years of work in a particular task that's been established to carry these exposures -- and, again, that's not in the SEM yet, but I think this is a good target for the -- for development.

So, people would either be in the job list for ten years, they've reported exposures on their occupational history questionnaire and relevant tasks allowing them to -- the evaluation of those for ten years, or solvent mixtures for ten years, or relevant tasks for ten years.

And I think -- okay. Yeah. So, the claims examiners should not routinely deny claims if the worker has fewer than ten years of exposure.

So, if they don't meet those four bullet points above, claims that did not meet the requirements set forth here, but do have reported exposure to organic solvents for at least five years cumulative should be sent to the IH and/or the CMC for review.

Which would, again, as part of a

presumption, the data suggests that you do need at least five years to get solvent-related hearing loss.

And if more research comes out to put it at a lower level, this presumption could be adjusted down the road. But currently it's saying if you have ten cumulative years, you're going to get in with one of those ways of documenting what the exposure is.

If you have five years, then you need an individual assessment. If you have fewer than five years, you wouldn't be able to file a claim under this presumption. And that's it.

CHAIR MARKOWITZ: Okay. So, thank you, Dr. Welch. So, obviously we're not going to discuss this, but I have just a couple questions.

One is, could we address -- as opposed to waiting until our next face-to-face meeting, which will probably be in October/November, could we have a telephone meeting of the Board in June or early July specifically to address -- to be able to discuss this and consider it?

You know, claims for hearing loss come in all the time. And if we're going to settle on a recommendation that might significantly change the policy of the DOL, then I feel like we should get to it sooner rather than later.

And then the second question is that before that meeting, I think if we had a draft rationale for this, as well as some of the references so we could look at that, that would also be helpful in discussing that.

So, how do people feel -- first of all, let me just ask Doug whether it would be possible to have a telephonic meeting of the Board.

MR. FITZGERALD: It's theoretically possible.

(Laughter.)

MR. FITZGERALD: The time frame, I think we're really probably looking at July, not June, only because of the internal clearance process. I think that would be the earliest.

Carrie, would you concur with that or

--

(Off the record comments.)

MR. FITZGERALD: Okay. Well, we just know it took about seven weeks for the last approval process to go through.

CHAIR MARKOWITZ: Okay. And it will be a simple agenda.

MR. FITZGERALD: Yeah. And the only other issue, and I don't think it's a big one, is just to check our budget for the costs associated with a meeting.

CHAIR MARKOWITZ: Okay.

MR. FITZGERALD: But since it's telephonic, it shouldn't be that much.

CHAIR MARKOWITZ: Okay. And how about the board members? Is that okay to do that?

Okay. And, Dr. Welch, in terms of providing a draft rationale and the sources, that would be possible?

MEMBER WELCH: Yes. And, you know, this -- our subcommittee -- we've talked about it, but I'll make sure that they get a chance to

look at it first, submit comments, et cetera.

CHAIR MARKOWITZ: Right. Okay.

MEMBER WELCH: And in addition by the time we all see it again -- I mean we already have the rationale. So I would need to get that out to everybody six weeks before the call, at the time we schedule it.

And since it's going to be a convenience between scheduling the other --

CHAIR MARKOWITZ: We wouldn't have time -- I don't think we'd have time for a subcommittee call.

MEMBER WELCH: No. No, no.

CHAIR MARKOWITZ: Right. Okay.

MEMBER WELCH: I'm just saying if -- my deadline if we were to have the meeting in the beginning of July -- as long as it's after May --

CHAIR MARKOWITZ: Well, I don't -- we need -- well, it depends whether we publish the draft -- the recommendation or not, but we'll settle that. We'll settle that.

MEMBER WELCH: Yeah.

CHAIR MARKOWITZ: We'll settle that.

MEMBER WELCH: I think that's possible.

CHAIR MARKOWITZ: Okay. Okay. Good. So, just a few miscellaneous items before we close the meeting.

The charter for this board is up for renewal in July 2017. And that process has been initiated by Department of Labor.

We, as individual members, our individual term expires in February 2018. And the start of that renewal process begins in September of 2017.

And we don't know exactly what that renewal process consists of, but I'm sure the Department of Labor will let us know at the appropriate time.

You need to -- if you haven't done so, you need to complete your financial disclosure forms prior to next Wednesday. Prior to next Wednesday.

Okay. So, if you haven't sent in

those forms, you really need to be so that we can remain in compliance with the regulations.

MEMBER BODEN: Can I ask a favor of DOL folks?

You just sent around to everybody a request if you haven't completed it.

Would you send to the people who have a confirmation, that we have -- I believe I have, but I want to make sure you got it.

CHAIR MARKOWITZ: Right. So many financial disclosure forms in so little time.

(Laughter.)

CHAIR MARKOWITZ: So, in terms of just to remind the subcommittee chairs that if you want to have a call as a subcommittee, you need six weeks advance notice for it to appear in the Federal Register.

So, you need to start thinking in the next couple of weeks about scheduling that call and then make the request to the Department of Labor.

In particular, I'm thinking that July

and August might be problematic in terms of people's schedules, so that really brings us to the decision of the next couple weeks about that so that you can schedule it during June. You can figure out the timing yourself.

In terms of the next board meeting, it will likely be in October. We will -- I think we'll circulate the potential dates and potential sites.

I don't really want to have a full discussion of locations now, but I would note it's been extremely useful and helpful to the Board to be in the field, to be at sites where we get a tour of the site, get a better sense of the -- what happens, what occurs within the complex.

And we also emphasize sites in which there are large numbers of claimants so that claimants have -- and DOE workers, in general, have access to these meetings. So, we will continue to follow that -- those ideas.

The public comments that have come in, Carrie Rhoads will be cataloging and figuring out

some way that we can work with her to keep track of those comments, make sure they're circulated both to the Board as a whole, but also to the relevant subcommittees.

We also -- the Board receives letters from individuals, from organizations which are circulated among us. Most of them don't require responses from us, but they will be sent to all the board members and also to the subcommittees.

And they raise items -- they're also raised in the public comments as well, but other items as well. So -- but if -- I should say that if you don't -- if members of the public or organization send us letters and you don't receive a response from us, it's because the letter didn't require a response or because we haven't really engaged in that kind of back and forth with that kind of communication.

I think that's pretty much -- in terms of -- do members of the board have particular issues, last-minute issues, administrative or otherwise, questions that we should discuss?

MEMBER POPE: I have a question.

CHAIR MARKOWITZ: Ms. Pope.

MEMBER POPE: I'd just like DOL to keep us informed or keep us updated as to when our recommendations will be implemented.

CHAIR MARKOWITZ: Okay. Mr. Griffon.

MEMBER GRIFFON: No comments, Steve.

CHAIR MARKOWITZ: So, then we've reached the close of this meeting. Let me just thank the members of the Board for all the hard work that we're doing.

Also, members of the public for hanging in with us through some interesting and sometimes complicated discussions.

We appreciate your attendance. We appreciate your input, really, into the process. And that includes the members of the public who are here, and also people who are on the phone.

I want to thank Department of Labor for helping us have these board meetings, especially Doug and Carrie.

And I'd like to thank Ms. Leiton for

attending and being very responsive to the questions we had.

And of course we're thankful to the other members of the Department of Labor, Mr. Nelson and colleagues; Department of Energy, who are no longer here, and the like.

So, with that, I'd like to close the meeting.

MR. FITZGERALD: Okay. Thank you, Mr. Chairman. And I just want to thank you and the board for all your hard work on behalf of the Energy program.

I want to thank the public for being here and providing their comments and participating with us.

And that brings us to a close and this meeting is officially adjourned.

(Whereupon, the above-entitled matter went off the record at 10:55 a.m.)

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C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Advisory Board on Toxic Substances and Worker Health

Before: US DOL

Date: 04-20-17

Place: Richland, Washington

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Neal R. Gross

Court Reporter